

SOLICITATION FOR FINANCIAL ASSISTANCE APPLICATIONS

SOLICITATION NO. DE-SC02-00ER12245

for the

COMMERCIALIZATION ASSISTANCE PROGRAM (CAP)

June 30, 2000

TO: Prospective Applicants

SUBJECT: SOLICITATION NO. DE-SC02-00ER12245 FOR

THE COMMERCIALIZATION ASSISTANCE PROGRAM (CAP)

EXECUTIVE SUMMARY LETTER

This letter is a summary of the salient elements of the financial assistance solicitation, but is not an integral part of the solicitation. Should there be any conflict between this Executive Summary Letter and the solicitation, the data and information in the solicitation shall prevail.

The Department of Energy (DOE) invites applications from small businesses for financial assistance for the Commercialization Assistance Program. The major objective of the program is to provide individualized assistance to SBIR Phase II financial assistance recipients which will lead to successful commercialization of products, services, or technology developed in the SBIR program. Appendix A of the solicitation identifies previous work provided under the CAP program.

It is anticipated that one or more cooperative agreements will be awarded as a result of this solicitation.

Significant items of interest concerning the solicitation are:

- 1. **Eligibility** Only small businesses are eligible to submit applications.
- 2. **Program Policy Factor** In the event multiple awards are made, overall technical scores notwithstanding, the Government intends to select separate and distinct approaches to commercializing SBIR products, services, or technologies, in order to maximize the benefits and options available to SBIR recipients. Thus, pursuant to 10 CFR 600.8(c)(13)(iii), a diversity of proposed methods, approaches or kinds of work will serve as a program policy factor.
- 3. **Applicable Regulations** The applicable regulations governing cooperative agreements are the FINANCIAL ASSISTANCE RULES, 10 CFR PART 600, which may be downloaded or viewed from the Internet athttp://www.pr.doe.gov/fahome.htmlorwww.pr.doe.gov/faregs.htmlorwww.pr.doe.gov/f600toc.html

All correspondence or questions concerning the solicitation must cite the solicitation number and be addressed in writing to either of the below listed DOE Point of Contact:

Ms. Tonja Stokes

Panel Co-Chairman

Solicitation No. DE-SC02-00ER12245

U.S. Department of Energy
Chicago Operations Office

9800 South Cass Avenue
Argonne, Illinois 60439

Ms. Reneé L. Irwin

Panel Chairman

Solicitation No. DE-SC02-00ER12245

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Applications are due no later than August 8, 2000, by 2:00 p.m., local prevailing time, at the Department of Energy, Chicago Operations Office, 9800 South Cass Avenue, Argonne, Illinois, 60439, ATTN: Ms. Tonja L. Stokes, Communications Center, Building 201, Room 168.

Sincerely,

Reneé L. Irwin, Chairman Source Evaluation Panel

U.S. DEPARTMENT OF ENERGY CHICAGO OPERATIONS OFFICE

SOLICITATION FOR FINANCIAL ASSISTANCE APPLICATIONS

SFAA NO. DE-SC02-00ER12245

COMMERCIALIZATION ASSISTANCE PROGRAM (CAP)

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SOLICITATION FOR THE COMMERCIALIZATION ASSISTANCE PROGRAM (CAP)

1. PROGRAM DESCRIPTION

1.1 Program Objectives

The Department of Energy (DOE), Office of Science (SC), invites small businesses to submit applications for financial assistance for the Commercialization Assistance Program (CAP).

The Commercialization Assistance Program is a small business set-aside program. The Department of Energy has supported a Commercialization Assistance Program for more than ten years. Past experience has shown that a small business serving small businesses provides more credibility as they often share common goals, concerns, and are knowledgeable of small business milestones for success. Prior experience has also confirmed that small businesses develop stronger, effective, and more productive business relationships. Accordingly, eligibility for this solicitation is limited to small businesses.

The Department's goal for the CAP program is to accelerate the development, demonstration, and commercialization of products or services resulting from the research of Small Business Innovative Research (SBIR) Phase II financial assistance award recipients. Although the CAP program is a continuing program which DOE has supported in the past, applications in response to this solicitation may, but are not required, to propose new methods or approaches.

The major objective of the program is to provide individualized assistance to SBIR Phase II recipients which will lead to investments or partnerships needed for the successful commercialization of technology developed in the SBIR program. The individualized assistance includes, but is not limited, to business related areas such as raising capital, preparation of business plans, forecasts, product focus, strategic partnering, and marketing.

1.2 Background

SBIR Program

The SBIR program was created by P.L. 97-219 the Small Business Innovation Development Act of 1982, as amended by, P.L. 102-564, the Small Business Research and Development Enhancement Act of 1992. Pursuant to these Acts, DOE supports, through competitive awards to small businesses, projects that satisfy DOE research and development (R&D) needs in such areas as Basic Energy Sciences, Health and Environmental Research, Computational and Technology Research, Fusion Energy Sciences, High Energy and Nuclear Physics, Energy Efficiency and Renewable Energy, Fossil Energy, Nuclear Energy, Environmental Management, and Nonproliferation/National Security.

The SBIR program is a three-phase program. Phase I awards provide funding for a six month term to explore feasibility of innovative research concepts. Companies that successfully complete Phase I are eligible to compete for Phase II awards. Phase II of the project is the principal R&D phase which may culminate into a prototype product or service that could be demonstrated for a potential investor or partner. Phase II awards are funded up to \$750,000.00 with a two-year project period. Each year, the Department selects an estimated 200 Phase I awards and 80 Phase II awards. In Phase III, the small businesses are expected to pursue the commercialization of products and/or services developed in the SBIR program. Funding for Phase III must come from either the private sector, or alternatively may involve follow-on non-SBIR Federal contracts for products and/or services desired by the Government.

To be eligible for SBIR awards, companies must be small businesses defined as having no more than 500 employees. Past experience reflects that the median company size of DOE SBIR awards is approximately 15 employees. The typical small business has received the majority of its support from R&D funding, and key personnel usually have scientific or engineering backgrounds. Their experience in identifying and developing markets, and in bringing products and/or services to these markets, is generally limited.

Commercialization Assistance Program

The DOE has supported a Commercialization Assistance Program for more than ten years. The CAP program provides individual assistance to SBIR Phase II recipients in preparing business plans and developing presentation materials for raising capital or finding strategic partners to support and maximize the commercialization of products, technology, and/or services developed during the SBIR Phase II R&D period. Previous work provided under the CAP program may be found in Appendix A.

Further, the CAP program culminates in a Commercialization Opportunity Forum in which SBIR recipients make presentations to potential investors (representatives from large corporations and venture capital firms).

As a result of the CAP program, more than half of the SBIR Phase II companies have obtained funding for Phase III of the SBIR program (currently more than \$400 million) for products, technology, and/or services developed under the SBIR program.

1.3 Statement of Work

Respondents to this solicitation shall submit a detailed, non-proprietary, Statement of Work. An example is provided in Appendix O.

The statement of work should propose to provide SBIR Phase II recipients with individualized assistance leading to investments or partnerships needed for the successful commercialization of SBIR technology. The individualized assistance may include but is not limited to business related areas such as raising capital, preparation of business plans and forecasts, product focus, strategic partnering, and marketing.

Set forth in Appendix A to this solicitation is a description of the assistance which the Commercialization Assistance Program (CAP) provided to Phase II SBIR recipients in previous years. Respondents to this solicitation may, but are not required to, propose a similar method of approach as has been used in past years for this project. DOE is

interested in, and will consider, new ideas for providing assistance to SBIR Phase II recipients which will increase the likelihood of commercializing SBIR products, services, and technology. Hence, possible responses to this solicitation include: (1) an approach that is substantially similar to the CAP process described in Appendix A; (2) an approach based on the CAP process but with important modifications; or (3) alternative approaches. Respondents must clearly identify, as reflected in the example statement of work (Appendix O), which of the preceding three general approaches is being pursued.

1.4 Reporting Requirements

The reporting requirements applicable to award(s) resulting from this solicitation are substantially the same as set forth in the Federal Assistance Reporting Checklist (DOE F 4600.2), found under Appendix B.

1.5 Type of Award Instrument

Award(s) resulting from this solicitation shall be made using a cooperative agreement. A sample copy of a cooperative agreement may be found under Appendix P. Rules governing cooperative agreements are found at 10 CFR Part 600 and may be viewed or downloaded from the internet athttp://www.pr.doe.gov/faregs.html

1.6 Number of Anticipated Awards and Estimated Funding

DOE expects to award one or more cooperative agreements as a result of this solicitation. The total estimated funding for all awards is up to \$750,000.00 over a three year period. DOE estimates that \$250,000.00 of the total funding will be available for obligation during Fiscal Year 2001. All awards are subject to the availability of funds. DOE reserves the right to fund, in whole or in part, any, all, or none of the applications submitted in response to this solicitation.

1.7 Anticipated Selection and Award Dates

DOE expects to make selection for award on or about October 1, 2000. Selections will be referred to the DOE Chicago Operations Office (CH) for negotiation and subsequent award on or about November 30, 2000.

2. APPLICATION REQUIREMENTS

2.1 Eligibility

This solicitation is a small business restricted eligibility solicitation.

For purposes of this solicitation, the size standards for small businesses may be found at Title 13 of the Code of Federal Regulations (CFR) Part 121.201 and may be viewed or downloaded from the internet at http://www.access.gpo.gov/nara/cfr/index.html

2.2 Facilities/Property

Facilities and/or property for accomplishing the statement of work will not be provided by the Department of Energy. Applicants are expected to provide all necessary personnel, facilities, equipment, and materials to accomplish the statement of work, and are encouraged to utilize existing facilities to the greatest extent practicable.

3. APPLICATION INSTRUCTIONS AND FORMAT

3.1 Protection of Application Information

DOE's policy is to use data included in applications for evaluation purposes only and to protect such information from unauthorized use or disclosure. Information contained in unsuccessful applications will remain the property of the applicant. The Government will retain one file copy of each unsuccessful application and destroy the remaining copies. Copies will not be returned to the applicant. Public release of information in any application submitted will be subject to existing statutory and regulatory requirements, e.g., Freedom of Information Act.

Government personnel, as well as, outside reviewers may be used in the merit review process. In designating outside reviewers, DOE will take into consideration requirements for avoidance of organizational and personal conflicts of interest and the competitive relationship, if any, between the applicant and the prospective outside reviewer. All merit reviewers must sign a Conflict-of-Interest/Non-Disclosure Certificate, in writing or electronically, prior to the beginning of the review process. The reviewer must certify that he/she will not participate in the review of any financial assistance application/proposal involving a particular matter in which the reviewer has a conflict of interest or where a reasonable person may question the reviewer's impartiality. In addition, the reviewer must agree to disclose any actual or perceived conflicts of interest as soon as the reviewer is aware of the conflict. The certification also stipulates that the data contained in the application will be used only for evaluation purposes and will not be further disclosed. **Submission of an application constitutes consent for its review by outside reviewers.**

3.2 Application Submission Costs

Issuance of this solicitation does not commit DOE to pay any application preparation costs. If an award is made, such costs may be allowable as provided in the applicable cost principles (see 10 CFR 600.127).

3.3 Overview

Applications should fully address all of the requirements of this solicitation, and be submitted in accordance with the format set forth in this Section. In addition, applications should be direct, concise, and informative. Marketing and/or promotional information and non-project related discussion will not be evaluated.

Any consultants identified in the application must have agreed to serve in the manner and to the extent described in the application. A letter of commitment signed by each consultant, certifying availability and salary history, must be submitted as part of your application.

If any physical facilities and equipment to be used to perform the statement of work identified in the application are not the property of the applicant, and are not to be purchased or leased for this work, source of the equipment and facilities must be clearly identified and availability specifically confirmed in the application.

Applications must be signed by the Principal Investigator and by an individual who is authorized to commit the applicant's organization to the terms and conditions of the cooperative agreement, if awarded.

3.4 General Instructions

A. Number of Volumes and Copies

Applications are to be submitted in three (3) separate volumes, to the address specified in Section 6.1, and clearly marked as follows:

Volume I - Technical Application

Volume II - Business Application

Volume III - Cost Application

An original and seven (7) consecutively numbered copies of each volume shall be submitted. Each volume should include a table of contents and consecutively numbered pages.

B. Page Size

The pages should be of standard 8-1/2" x 11" size (21.6cm x 27.9cm), with 1" margins around the top, bottom, and sides, and printed on both sides. For proportionally spaced fonts, the type can be no smaller than 12 points, and for non-proportionally spaced fonts, the type can be no smaller than 12 characters per inch (elite). For the purpose of page limitation, the front and back sides of a single sheet are counted as two (2) pages.

C. Page Limitations

Volume I - Technical Application, <u>shall not exceed</u> 25 pages in length, exclusive of the Application Page, SF-424, Appendix C, table of contents, and statement of work. <u>Pages in excess of the 25 page limitation for Volume I - Technical Application shall not be evaluated.</u>

There are no page limitations in effect for either Volume II - Business Application or for Volume III - Cost Application.

3.5 Application Format

A. VOLUME I - TECHNICAL APPLICATION

The technical application is to provide sufficient information to convince DOE that the application is responsive to the CAP program and the proposed work represents a sound approach to perform the statement of work. The technical application should also address each criterion in the same sequence as set forth below.

With the exception of the statement of work, the technical application may contain proprietary data. Applications containing proprietary data <u>must</u> be clearly marked in accordance with Section 5.2 of this solicitation.

(1) Application for Federal Assistance, SF-424- Complete the form identified as Appendix C in this solicitation. This is to be the cover page on each of the required 7 copies of your application. No other cover page is permitted. Photocopy the Face Page form before using it.

(2) Table of Contents

- (3) **Statement of Work Page** Complete a Statement of Work. A detailed format and example is provided as Appendix O. The statement of work page shall not contain proprietary information.
- (4) **Primary Content** The technical proposal is to begin on page 4 of your application. Each of the below evaluation criteria is to be addressed in your application.
 - (a) <u>Technical Approach</u>- Provide a detailed, complete, and in-depth discussion of the planned technical approach to perform: outreach effort; business plan development; market research; commercialization strategy; and maintaining individualized service to SBIR recipients to maximize commercialization potential of SBIR recipient's technology and or products/services.
 - (b) Company and Personnel Experience and Qualifications Provide a detailed management plan; work breakdown structure (WBS); and program schedule which includes an explicit, detailed description of the work to be performed; what will be done, where it will be done; and how the work will be carried out. The WBS and program schedule should be linked with performance milestones planned to accomplish the statement of work. Further, discuss the facilities and equipment which will be used to perform the statement of work.

Provide a discussion of the company's previous experience in similar projects, and degree to which the company has been successful in previous outreach effort, business plan development, market research, and commercialization strategy development.

Identify the Principal Investigator and other key personnel involved, including their directly related education, experience, and bibliographic information. When vitae are extensive, summaries that focus on the most relevant experience or publications are desired, and such brevity may be necessary due to the application size limitation (see Section 3.4 C).

B. VOLUME II - BUSINESS APPLICATION

The Volume II - Business Application should contain the following items. There is no page limitation for this Volume.

- (1) **Application for Federal Assistance, SF-424** Complete the form identified as Appendix C in this solicitation. This is to be the cover page on each of the required 7 copies of your application. No other cover page is permitted. Photocopy the Face Page form before using it.
- (2) **Accounting System** Provide a description of the accounting system that will be utilized to control and accumulate costs for the proposed work. The discussion should provide information evidencing that the applicant's financial management system meets each requirement of 10 CFR 600.121.
- (3) **Financial Capability** The applicant is to submit the latest certified annual report, Form 10K, financial statement, and any other evidence of the company's financial status sufficient to demonstrate capability to carry out the proposed work.
- (4) **Similar Financial Assistance Applications** Proposals or Awards While it is permissible, with notification in the financial assistance applications, to submit identical proposals or proposals containing a significant amount of essentially equivalent work for consideration under numerous federal program solicitations, it is unlawful to enter into financial assistance requiring essentially equivalent work. If there is any question concerning this, it must be disclosed to the soliciting agency or agencies before award. If such a proposal has been previously funded or is either funded, pending, or about to be submitted to another federal agency or to DOE in a separate action, the applicant must provide the following information in the application:
 - (a) The name and address of the agency(s) to which a proposal or financial assistance application was submitted, or will be submitted, or from which an award is expected or has been received.
 - (b) The date of submission or the date of award;
 - (c) The title of the application;
 - (d) The name and title of the project manager or Principal Investigator for each proposal or application submitted or award received;

- (e) The name and date of the solicitation under which the application of award was received;
- (f) The title of the specific research topic to which the application or award was submitted.
- (5) Complete the "Representation Concerning Financial Management System", included in this solicitation as Appendix D.
- (6) Complete the "Assurance of Compliance" (DOE F 1600.5), included in this solicitation as Appendix E.
- (7) Complete the "Certifications Regarding Lobbying, Debarment, Suspension and Other Responsibility Matters; and Drug-Free Workplace Requirements" (FA-CERTS), included in this solicitation as Appendix F.
- (8) If applicable, complete the "Disclosure of Lobbying Activities" (SF-LLL), included in this solicitation as Appendix G.
- (9) Complete the "Financial Assistance Pre-Award Information Sheet" (AA-47), included in this solicitation as Appendix H. **Note: This form must be completed by any proposed subcontractor as well.**
- (10) Complete the "Automated Clearing House (ACH) Vendor/Miscellaneous Payment Enrollment Form", included in this solicitation as Appendix I.
- (11) Complete the "Simpson-Craig Amendment Representation", included in this solicitation as Appendix J. (See Section 7.6)
- (12) Complete the "National Environmental Policy Act Environmental Evaluation Notification Form", included in this solicitation as Appendix K.

C. VOLUME III - COST APPLICATION

The Volume III - Cost Application should contain the following information. There is no page limitation for this Volume.

- (1) Application for Federal Assistance, Face Page (SF-424) Complete the form included as Appendix C to this solicitation. This is to be the cover page on each of the required number of copies of your Cost Application. No other cover page is permitted.
- (2) Submit a summary of all proposed costs for the entire project period using the "Federal Assistance Budget Information" (DOE F 4600.4) included in this solicitation as Appendix L.
- (3) Complete the "Budget Explanation Page" for the Budget Form DOE F 4600.4, included in this solicitation as Appendix M.

- (4) If your Cost Application is for a multi-year period, or involves more than one phase, submit, in addition to the summary data above, a separate "Budget Page" and "Budget Explanation Page" for each year or phase of the project.
- (5) Each subcontractor must also submit a summary "Budget Information Page" and "Budget Explanation Page" for their proposed costs.
- (6) Indirect Rates If indirect rates have been negotiated with or approved by a federal agency for the period, provide a copy of the agreement and do not submit the data required in Appendix N. If no current rate agreement exists covering the proposed period of performance, submit an indirect cost rate proposal using the model provided in Appendix N. In either case, identify separately the proposed indirect costs for each of your accounting periods included in the application. Clearly identify each rate and allocation base for indirect costs such as labor overhead, and general and administrative, etc.

3.6 General Correspondence

Questions pertaining to the requirements and/or content of this solicitation must be addressed, in writing (by correspondence, by fax, or by electronic mail), to one of the below Panel Chairpersons. Only the Panel Chairperson is authorized to provide instructions and guidance. Minor administrative concerns may be addressed over the telephone at the Panel Chairman's discretion. The Panel Chairman may be reached at:

<u>Chairman:</u> <u>Co-Chairman:</u>

Reneé L. Irwin Tonja L. Stokes

Telephone No.: (630) 252-2566 Telephone No.: (630) 252-2136 Fax No.: (630) 252-5045 Fax No.: (630) 252-5045

4. APPLICATION EVALUATION

4.1 Merit Review

Applications will be evaluated in accordance with the criteria set forth in this solicitation and 10 CFR 600.13 Merit Review. Other guidelines, requirements, and public laws, will be utilized as deemed applicable.

An application will be eliminated from further consideration if it does not meet the eligibility requirement set forth in Section 2 of this solicitation, or if it is so obviously deficient as to be totally unacceptable on its surface. For example, if it does not represent a reasonable initial effort to address the essential requirements of the solicitation or it clearly demonstrates that the applicant does not understand the requirements of the solicitation, the application would be considered unacceptable.

Applications which have successfully completed the above initial review are subjected to a merit review by a group comprised of three or more professionally and technically

qualified individuals. The review is limited to the technical, business, and cost criterion. The programmatic review of program/policy factors listed in this solicitation are separate and applied by the Source Selection Official.

The technical application will be numerically point scored in accordance with the evaluation criteria and weights set forth in Section 4.3 below.

The business application will not be numerically point scored nor will it be adjectivally rated. However, it will be used by the Evaluation Panel to conduct a general business review of your application, and to make the required responsibility determination.

The cost application will not be point scored nor adjectivally rated, but will be evaluated to access the applicant's understanding of the work, to determine if the total estimated cost proposed by the applicant is commensurate with the technical effort proposed.

While only those applications which best further the needs of the program, as specified in this solicitation, will be considered for award, DOE may accept for award all, portions, or none, of the applications submitted.

4.2 Debriefing

If a written request for a debriefing is received by the Panel Chairperson within ten (10) calendar days after the announcement of the final section(s), a verbal debriefing will be provided with information pertinent to DOE's evaluation of the application. Neither the identity of reviewers nor their verbatim comments will be disclosed. Debriefings will be scheduled at a time mutually convenient to DOE and the applicant.

4.3 Evaluation Criteria

With respect to the technical evaluation criteria set forth in this section, the following are the weighting factors that will be utilized to point score each application:

Criterion 1 – Soundness of the Technical Approach:
Criterion 2 – Capabilities and Experience:
Total Points Possible:

50 points
100 points

DOE plans to select for award the application(s) judged to be of the highest overall merit, with consideration given to the quality of the technical approach, company and personnel experience and qualifications; the business; and cost factors. The evaluation criteria are as follows:

A. Criterion 1: **Technical Approach**

50 points

The strength, adequacy, and quality of the proposed technical approach to perform: outreach effort; business plan development; market research; commercialization strategy; and maintaining individualized service to SBIR recipients to maximize commercialization potential of SBIR recipient's technology and or products/services will be evaluated.

B. Criterion 2: Company and Personnel Experience and Qualifications

50 points

The reasonableness and adequacy of the management and organization to perform the work as proposed. The completeness and realism of the proposed CAP program management plan, work breakdown structure, and program schedule. The extent of the company's previous experience in similar projects, and degree to which the applicant has been successful in previous outreach effort, business plan development, market research, and commercialization strategy development.

Further, the training, experience and qualifications of key personnel who will have direct contact with either SBIR recipients or potential investors/partners will be evaluated. In addition, the adequacy of the applicant's facilities will be evaluated.

C. Criterion 3: Business Evaluation

<u>Accounting System</u> - This section will evaluate the accounting system to insure that the applicant's financial management system meets the requirements of 10 CFR 600.121.

<u>Financial Capability</u> - This section will evaluate the applicants financial strength and demonstrated ability to financially carry out the proposed work.

<u>Past Reporting Experience</u> - This section will evaluate past reporting of the applicant.

D. Criterion: Cost

General - The applications will be evaluated with respect to adequacy, realism, and reasonableness. The evaluation will include consideration of the probable cost to the Government of doing business with the applicant. If, after evaluation of the applications, two or more applications are technically the same, award will be made to the application which represents the better value to the Government.

4.4 Program Policy Factor

Diversity of Approaches or Methods

The Government anticipates the award of one or more cooperative agreements under this solicitation. In the event multiple awards are made, overall technical scores notwithstanding, the Government intends to select separate and distinct approaches to commercializing SBIR products, services, and technologies, in order to maximize the benefits and options available to SBIR recipients. Thus, pursuant to 10 CFR 600.8(c)(13)(iii), a diversity of proposed methods, approaches or kinds of work will serve as a program policy factor.

4.5 Additional Information

This solicitation is intended for informational purposes and reflects current DOE objectives. If there is any inconsistency between the information contained herein and the terms of any resulting assistance award, the terms of the award shall prevail.

Before issuing an award, DOE may request the applicant to provide certain organizational, management, personnel and financial information to assure responsibility of the applicant.

The responsible DOE Contracting Officer for this solicitation is James R. Bieschke.

5. INTELLECTUAL PROPERTY PROVISIONS

5.1 Patent Rights

Domestic and small businesses and non-profit and educational organizations will have the right to elect to retain title pursuant to 35 USC 200 et seq.

5.2 Rights in Technical Data

The Government has unlimited rights in technical data created under the agreement. Delivery or licensing of technical date developed solely at private expense will not normally be required except as specifically negotiated in a particular agreement or as may be negotiated as a condition of a patent waiver to insure continued development toward commercialization of an invention arising under a DOE agreement. However, since this agreement does not contemplate any research, development, or demonstration work by the recipient, no inventions are anticipated.

6. SUBMISSION OF APPLICATIONS

6.1 Mailing Address

Electronic submission (e.g., telegraph, facsimile, or internet) of applications is not authorized, and such submissions will not be considered for evaluation. Applications must be submitted in writing to the following address, with external markings as set forth below:

FROM:

TO: U.S. Department of Energy

Chicago Operations Office

Communications Center, Building 201, Room 168

9800 South Cass Avenue Argonne, IL 60439-4899

ATTN: Tonja L. Stokes, Co-Chairperson

Acquisition and Assistance Group

THIS DOCUMENT IS SUBMITTED UNDER SOLICITATION NUMBER <u>DE-SC02-00ER12245</u> AND IS TO BE OPENED ONLY BY THE INDIVIDUAL DESIGNATED ABOVE.

6.2 Due Date for Applications

The deadline for receipt of applications is 2:00 p.m., local time, August 8, 2000.

6.3 Late Applications

Subject to the provisions of this section, an application received after the above specified due date and time will <u>not</u> be evaluated. The application will be opened only if necessary for purposes of identification, and then retained with other unsuccessful submissions.

- A. Any application received at the location designated in Section 6.1 after the exact time specified for receipt of applications will not be considered unless it has been received before award is made, and
 - (1) It was sent by registered or certified U.S. or Canadian mail not later than the fifth calendar day before the date specified for receipt of applications (e.g., an application submitted in response to a solicitation requiring receipt of applications by the 20th of the month must have been mailed by the 15th); or
 - (2) It is determined by the Government that the late receipt was due primarily to Government mishandling after receipt at the Government installation; or
 - (3) It was sent by U.S. Postal Service Express Mail Nest Day Service-Post Office to Addressee, not later than 5:00 p.m. at the place of mailing two working days prior to the date specified for receipt of applications. The term "working day's excludes weekends and U.S. Federal holidays; or
 - (4) There is acceptable evidence to establish that it was received at the activity designated for receipt of applications and was under the Government's control prior to the time set for receipt of applications, and the Contracting Officer determines that accep6ting the late application would not unduly delay the solicitation; or
 - (5) It is the only application received.
- B. The only acceptable evidence to establish the date of mailing of a late application, modification, or revisions sent by either registered or certified mail is the U.S. or Canadian Postal Service postmark both on the envelope or wrapper and on the original receipt from the U.S. or Canadian Postal Service. Both postmarks must show a legible date, or the application response to a request for information, or modification shall be processed as if it were mailed last. "Postmark" means a printed, stamped, or otherwise placed impression (exclusive of a postage meter machine impression) that is readily identifiable without further action as having been supplied and affixed by employees of the U.S. or Canadian Postal Service on the date of mailing. Therefore, applicants should

- request the postal clerk to place a legible hand cancellation bull's eye postmark on both the receipt and the envelope or wrapper.
- C. Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the application wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.
- D. The only acceptable evidence to establish the date of mailing of a late application, modification or revision sent by Express Mail Next Day Service-Post Office to Addressee is the date entered by the Post Office receiving clerk on the "Express Mail Next Day Service-Post Office to Addressee" label and the postmark on both the envelop or wrapper and on the original receipt from the U.S. Postal Service. "Postmark" has the same meaning as defined in paragraph B. of this section, excluding postmarks of the Canadian Postal Service. Therefore, applicants should request the postal clerk to place a legible hand cancellation bull's eye postmark on both the receipt and the envelope or wrapper.
- E. Notwithstanding paragraph A. of this section, a late modification of an otherwise successful application that makes its terms more favorable to the Government will be considered at any time it is received and may be accepted.
- F. Applications may be withdrawn by written notice or telegram (including mailgram) received at any time before award. Applications may be withdrawn in person by an applicant or an authorized representative, if the representative's identity is made known and the representative signs a receipt for the application before award.
- G. If an emergency or unanticipated event interrupts normal Government processes so that applications cannot be received at the office designated for receipt of applications by the exact time specified in the solicitation, and urgent Government requirements preclude amendment of the solicitation or other notice of an extension of the closing date, the time specified for receipt of applications will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.

6.4 Handcarried Applications

Handcarried applications are those submitted by any means other than through the U.S. or Canadian mail. If an applicant submits its application by means other than the U.S. or Canadian mail (including via common carrier or any other means of delivery), the applicant assumes the full responsibility of ensuring that the application is received at the address specified in Section 6.1, by the date and time specified in Section 6.2.

External markings on handcarried application packages shall include substantially the same information provided when submitting the application through the U.S. or Canadian mail (see Section 6.1).

Applicants are advised that the U.S. Department of Energy, Chicago Operations Office, is located on the site of the Argonne National Laboratory (ANL), but is a separate and

distinct entity from ANL. As stated above, handcarried applications must be received at only the location specified in Section 6.1. Delivery to and/or acceptance of an application at any other location, including the ANL Visitor's Reception Center, the ANL Loading Dock at Bldg. 5, the DOE Loading Dock at Bldg. 201, or to any other ANL or DOE receiving pointdoes not constitute delivery of the application in accordance with the terms of this solicitation.

Applicants are further advised that:

Applicants are urged to allow sufficient time for the delivery of any handcarried applications.

- (1) Delivery to a location other than the address specified in Section 6.1 will experience delays due to normal mail handling procedures on site and may result in the application not being received by DOE by the date and time specified in Section 6.2 above.
- (2) ANL is a contractor operated, controlled-access facility, which may require advance clearance arrangements, particularly for non-U.S. citizens. Sufficient time should be allotted for normal admittance procedures, which may be coordinated with Ms. Tonja L. Stokes, at (630) 252-2136.

7. REGULATORY INFORMATION

7.1 DOE Minority Economic Impact Program

No funding is available under the Department of Energy (DOE Minority Economic Impact (MEI) Program, 10 CFR Part 800, to finance the cost of preparing a financial assistance application under this solicitation.

7.2 Catalog of Federal Domestic Assistance

The Catalog of Federal Domestic Assistance (CFDA) Number for this solicitation is 81.049.

7.3 Intergovernmental Review

Presubmission reviews and clearances under E.O. 12372 "Intergovernmental Review of Federal Programs" is not required under this solicitation.

7.4 Applicable Regulations

The regulations applicable to this solicitation and its resultant awards is 10 CFR Part 600. These regulations can be found on the DOE Financial Assistance Home Page at: http://www.pr.doe.gov/fahome.htmlor www.pr.doe.gov/fahome.htmlor www.pr.doe.gov/fahome.htmlor www.pr.doe.gov/fahome.htmlor www.pr.doe.gov/fahome.htmlor http://www.pr.doe.gov/fahome.htmlor www.pr.doe.gov/fahome.htmlor www.pr.doe.gov/fahome.htmlor www.pr.doe.gov/fahome.htmlor www.pr.doe.gov/fahome.htmlor http://www.pr.doe.gov/fahome.htmlor www.pr.doe.gov/fahome.htmlor http://www.pr.doe.gov/fahome.htmlor http://www.pr.doe.gov/fahome.htmlor http://www.pr.doe.gov/fahome.htmlor www.pr.doe.gov/fahome.htmlor www.pr.doe.gov/fahome.htmlor http://www.pr.doe.gov/fahome.htm

7.5 Statutory Authority

The statutory authority for this program is the U.S. Department of Energy Organization Act (Public Law 95-91).

7.6 Simpson-Craig Amendment

Applicant organizations which are described in Section 501(c)(4) of the Internal Revenue Code of 1986 and engage in lobbying activities after December 31, 1995 shall not be eligible for the receipt of Federal funds constituting an award, grant, or loan. Section 501(c)(4) of the Internal Revenue Code covers:

"Civic leagues or organizations not organized for profit but operated exclusively for the promotion of social welfare, or local associations of employees, the membership of which is limited to the employees of a designated person or persons in a particular municipality, and the net earnings of which are devoted exclusively to charitable, educational, or recreational purposes."

As set forth in Section 3 of the Lobbying Disclosure Act of 1995, as amended, (2 U.S.C. 1602), lobbying activities are defined broadly to include, among other things, contacts on behalf of an organization with specified employees of the Executive Branch and Congress with regard to federal legislative, regulatory, and program administrative matters. Applicants qualifying as described in Section 501(c)(4) of the Internal Revenue Code of 1986 must fill out the representation included in Appendix J of this solicitation.

APPENDICES

<u>Appendix</u>	<u>Title</u>
A	Previous Work
В	Federal Assistance Reporting Checklist (DOE F 4600.2)
C	Application for Federal Assistance (SF-424)
D	Representation Concerning Financial Management System
E	Assurance of Compliance (DOE F 1600.5)
F	Certifications Regarding Lobbying, Debarment, Suspension and Other Responsibility Matters; and Drug-Free Workplace (FA-CERTS)
G	Disclosure of Lobbying Activities (SF-LLL)
Н	Financial Assistance Pre-Award Information Sheet (AA-47)
I	Automated Clearing House (ACH) Vendor/Miscellaneous Payment Enrollment Form
J	Simpson-Craig Amendment Representation
K	National Environmental Policy Act Environmental Evaluation Notification Form
L	Federal Assistance Budget Information (DOE F 4600.4)
M	Budget Explanation Page
N	Model Indirect Cost Rate Proposal
O	Example Statement of Work
P	Sample Cooperative Agreement

COMMERCIALIZATION ASSISTANCE PROGRAM (CAP) PREVIOUS WORK

In previous years, the Commercialization Assistance Program (CAP), provided services to SBIR Phase II recipients as described below. Note that conformance with this process is an option, not a requirement, for applications submitted in response to this solicitation.

Kickoff Meeting

The DOE SBIR Program notifies SBIR awardees of an upcoming CAP. The organization selected by DOE to provide assistance to the SBIR Phase II recipients (hereafter called the CAP provider) conducts outreach to assure a suitable level of participation. 60-70 SBIR awardees attend a kickoff meeting, mandatory for CAP participants, led by the CAP provider at the DOE Germantown facility. Attendees are advised of the CAP process and the amount of work expected (about 300 person-hours per company). Typically 20-25 SBIR awardees drop out at this time often because of the large time demands.

Business Plan Development

For about four months, the SBIR participants work individually with one of the CAP provider's staff members (using express mail, fax, phone, and Email) to develop a business plan through a series of iterations. The process begins with a "mind map" of all possible applications for the technology and gradually, using market research techniques, focusing on an optimal commercialization strategy. A series of interim reports are produced, culminating in a draft business plan. For a variety of reasons, additional companies drop out during this process. Finally, the DOE, in consultation with the CAP provider, selects about 20 participants to continue to the final stages of the CAP.

Advanced Commercialization Workshop

The remaining participants return to a hotel in the Germantown area for an intense two-day workshop which includes one-on-one sessions with the CAP provider's staff. The output of the workshop includes improvements to the draft business plan and instructions for further refinements.

Business Plan Refinement and Preparation of Presentation Materials

For the next couple of months, companies work individually with the CAP provider (using express mail, fax, phone, and Email) to refine business plans and prepare presentations for the Commercialization Opportunity Forum.

Commercialization Opportunity Forum

The commercialization Opportunity Forum, which takes place over two days in a Washington area hotel, is designed to facilitate interaction between technology entrepreneurs, potential strategic allies, and investors through a combination of formal presentations and informal networking opportunities. On the two days preceding the Forum, companies attend a Presentation Workshop in which the CAP provider works with participants to polish the delivery of their presentations and provide insight into the interests of the investors and strategic allies.

In preparation for the Forum, the SBIR participating companies identify prospective investors and allies. From these leads and others, it is the CAP provider's task to assure that a sufficient number of upper level decision makers from appropriate partnering and funding sources attend the Forum.

Follow-up

For a two-year period following the Forum, the CAP provider follows the progress of the SBIR CAP participants in attracting investments and partners and in commercializing their technology. The CAP provider prepares a report for the DOE.

DOE F 4600.2 (03-94) Replaces EIA-459A

U.S. Department of Energy FEDERAL ASSISTANCE REPORTING CHECKLIST

1. Identification Number:	2. Program/Project Title	e:		
DE-SC02-00ER12245	Financial Assistance Solicitation (FAS) for Commercialization Assistance Program for Awardees in the Small Business Innovation Research (SBIR) Program			
3. Recipient: TBD	, , , , , , , , , , , , , , , , , , , ,	,		
4. Reporting Requirements: PROGRAM/PROJECT MANAGEMENT REPORTING	Frequency	No. of Copies	Addressees	
 □ DOE F 4600.3, "Federal Assistance Milestone Plan" □ DOE F 4600.3A, "Milestone Log" □ DOE F 4600.4, "Federal Assistance Budget Information" □ DOE F 4600.5, "Federal Assistance Management Summary Report" □ DOE F 4600.6, "Federal Assistance Program/Project Status Report" □ SF-269A, "Financial Status Report" 	F	2	See NFAA Block 12	
TECHNICAL INFORMATION REPORTING DOE F 1430.22, Notice of Energy RD&D Project				
☐ Technical Progress Report (Informal)	A (See 5a below)	3	See NFAA Block 11	
☐ Topical Report ☐ Final Technical Report	F (See 5b below)	1 2	See NFAA Block 11 See NFAA Block 12	
 F - Final; 90 calendar days after the performance of the effort ends. Q - Quarterly; within 30 days after end of calendar quarter or portion thereof. O - One time after project starts; within 30 days after award. X - Required with proposals or the application or with significant planning changes. Y - Yearly; 30 days after the end of program year. (Financial Status Reports 90 days). S - Semiannually; within 30 days after the end of program fiscal half year. 				
 5. Special Instructions: a. Progress Report: Three copies of a Progress Report must be submitted as soon as possible after different phases of the project have been completed. b. Final Report: Three copies must be submitted within 90 days after the expiration date of the total performance period if the project is not to be renewed or extended, and must be accompanied by two copies of DOE F 241.1, "Announcement of Department of Energy (DOE) Scientific and Technical Information (STI)." (The final technical report should include a summary of the work performed, together with comments on the lessons learned by the project and on any particularly promising projects for commercial success noted by the recipient.) 6. Prepared by: (Signature and Date) 7. Reviewed by: (Signature and Date) 				
7. Reviewed by: (Signature and Date)				

Appendix C OMB Approval No. 0348-APPLICATION FOR 2. DATE SUBMITTED Applicant Identifier FEDERAL ASSISTANCE 1. TYPE OF SUBMISSION: 3. DATE RECEIVED BY STATE State Application Identifier Application Preapplication NA ☐ Construction Construction 4. DATE RECEIVED BY FEDERAL AGENCY Federal Identifier X Non-Construction Non-Construction DE-SC02-00ER12245 NA 5. APPLICANT INFORMATION Legal Name: Organizational Unit: Address (give city, county, State, and zip code): Name and telephone number of person to be contacted on matters invo this application (give area code) 6. EMPLOYER IDENTIFICATION NUMBER (EIN): 7. TYPE OF APPLICANT: (enter appropriate letter in box) A. State H. Independent School Dist. 8. TYPE OF APPLICATION: B. County 1. State Controlled Institution of Higher Learning C. Municipal J. Private University Revision X New Continuation D. Township K. Indian Tribe If Revision, enter appropriate letter(s) in box(es) E. Interstate L. Individual M. Profit Organization F. Intermunicipal A. Increase Award B. Decrease Award C. Increase Duration G. Special District N. Other (Specify) D. Decrease Duration Other(specify): 9. NAME OF FEDERAL AGENCY: 10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER: 11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT: 8 1 - 0 4 9 12. AREAS AFFECTED BY PROJECT (Cities, Counties, States, etc.): 13. PROPOSED PROJECT 14. CONGRESSIONAL DISTRICTS OF: Start Date **Ending Date** a. Applicant b. Project 15. ESTIMATED FUNDING: 16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE **ORDER 12372 PROCESS?** a. Federal \$ a. YES. THIS PREAPPLICATION/APPLICATION WAS MADE ΟÓ \$ **AVAILABLE TO THE STATE EXECUTIVE ORDER 12372** b. Applicant PROCESS FOR REVIEW ON: c. State \$ DATE 00 d. Local \$ b. No. R PROGRAM IS NOT COVERED BY E. O. 12372 00 OR PROGRAM HAS NOT BEEN SELECTED BY STATE e. Other \$ FOR REVIEW 00 f. Program Income \$ 17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT? g. TOTAL \$ Yes If "Yes," attach an explanation. ☐ No 18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED. c. Telephone Number a. Type Name of Authorized Representative b. Title d. Signature of Authorized Representative e. Date Signed

Public reporting burden for this collection of information is estimated to average 45 minutes per response, including time for reviewi instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0043), Washington, DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

This is a standard form used by applicants as a required facesheet for preapplications and applications submitted for Federal assistance, will be used by Federal agencies to obtain applicant certification that States which have established a review and comment procedure response to Executive Order 12372 and have selected the program to be included in their process, have been given an opportunity to reviet the applicant's submission.

respor	nse to Executive Order 12372 and have selected the program to be populated by plicant's submission.
Item:	Entry:
1.	Self-explanatory.
2.	Date application submitted to Federal agency (or State if applicable) and applicant's control number (if applicable).
3.	State use only (if applicable).
4.	If this application is to continue or revise an existing award, enter present Federal identifier number. If for a new project, leave blank.
5.	Legal name of applicant, name of primary organizational unit which will undertake the assistance activity, complete address of the applicant, and name and telephone number of the person to contact on matters related to this application.
6.	Enter Employer Identification Number (EIN) as assigned by the Internal Revenue Service.

- 7. Enter the appropriate letter in the space provided.
- 8. Check appropriate box and enter appropriate letter(s) in the space(s) provided:
 - -- "New" means a new assistance award.
 - -- "Continuation" means an extension for an additional funding/budget period for a project with a projected completion date.
 - -- "Revision" means any change in the Federal Government's financial obligation or contingent liability from an existing obligation.
- 9. Name of Federal agency from which assistance is being requested with this application.
- 10. Use the Catalog of Federal Domestic Assistance number and title of the program under which assistance is requested.
- 11. Enter a brief descriptive title of the project. If more than one program is involved, you should append an explanation on a separate sheet. If appropriate (e.g., construction or real property projects), attach a map showing project location. For preapplications, use a separate sheet to provide a summary description of this project.

Item: Entry:

- 12. List only the largest political entities affected (e.g., Stat counties, cities).
- 13. Self-explanatory.
- 14. List the applicant's Congressional District and any District(s) affected by the program or project.
- 15. Amount requested or to be contributed during the first funding/budget period by each contributor. Value of inkind contributions should be included on appropriate lines as applicable. If the action will result in a dollar change to an existing award, indicate only the amount of the change. For decreases, enclose the amounts in parentheses. If both basic and supplemental amounts are included, show breakdown on an attached sheet. For multiple program funding, use totals and show breakdown using same categories as item 15.
- 16. Applicants should contact the State Single Point of Contact (SPOC) for Federal Executive Order 12372 to determine whether the application is subject to the State intergovernmental review process.
- 17. This question applies to the applicant organization, not the person who signs as the authorized representative. Categories of debt include delinquent audit disallowances, loans and taxes.
- 18. To be signed by the authorized representative of the applicant. A copy of the governing body's authorization for you to sign this application as official representative must be on file in the applicant's office. (Certain Federal agencies may require that this authorization be submitted as part of the application.)

REPRESENTATION CONCERNING FINANCIAL MANAGEMENT SYSTEM

At 10 CFR 600.121, the Federal government prescribes certain standards for financial management systems under its financial assistance awards. The degree to which a recipient meets standards for fund control and accountability may impact the method by which the recipient is reimbursed under any resultant award. To receive advance payments, a recipient's financial management system must meet all of the requirements of 10 CFR 600.121, and specifically provide for the following:

- 1. Accurate, current, and complete disclosure of the financial results of each federally-sponsored project or program in accordance with the Department's financial reporting requirements;
- 2. Records that identify adequately the source and application of funds for Federally-sponsored activities;
- 3. Effective control over and accountability for all funds, property, and other assets;
- 4. Comparison of outlays with budget amounts for each award;
- 5. Written procedures to minimize the time elapsing between the transfer of funds to the recipient from the U.S. Treasury and the issuance or redemption of checks, warrants, or payments by other means for program purposes by the recipient;
- 6. Written procedures for determining the reasonableness, allocability, and allowability of costs in accordance with the provisions of the applicable Federal cost principles and the terms and conditions of the award; and
- 7. Accounting records, including cost accounting records that are supported by source documentation.

I hereby represent that my financial management system meets all of the standards for financial management systems set forth above:

Name	Date
Organization	

DOE F 1600.5 (06-94) OMB Control No. 1910-0400 All Other Editions Are Obsolete

U.S. Department of Energy Assurance of Compliance Nondiscrimination In Federally Assisted Programs

OMB Burden Disclosure Statement

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of Information Resources Management Policy, Plans, and Oversight, HR-4.3, Paperwork Reduction Project (1910-0400), U.S. Department of Energy, 1000 Independence Avenue, S.W., Washington, DC 20585; and to the Office of Management and Budget (OMB), Paperwork Reduction Project (1910-0400), Washington, DC 20503.

(Hereinafter called the "Applicant") HEREBY AGREES to comply with Title VI of the Civil Rights Act of 1964 (Pub. L. 88-352), Section 16 of the Federal Energy Administration Act of 1974 (Pub. L. 93-275), Section 401 of the Energy Reorganization Act of 1974 (Pub. L. 93-438), Title IX of the Education Amendments of 1972, as amended, (Pub. L. 92-318, Pub. L. 93-568, and Pub. L. 94-482), Section 504 of the Rehabilitation Act of 1973 (Pub. L. 93-112), the Age Discrimination Act of 1975 (Pub. L. 94-135), Title VIII of the Civil Rights Act of 1968 (Pub. L.90-284), the Department of Energy Organization Act of 1977 (Pub. L. 95-91), the Energy Conservation and Production Act of 1976, as amended, (Pub. L. 94-385) and Title 10, Code of Federal Regulations, Part 1040. In accordance with the above laws and regulations issued pursuant thereto, the Applicant agrees to assure that no person in the United States shall, on the ground of race, color, national origin, sex, age, or disability, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity in which the Applicant receives Federal assistance from the Department of Energy.

Applicability and Period of Obligation

In the case of any service, financial aid, covered employment, equipment, property, or structure provided, leased, or improved with Federal assistance extended to the Applicant by the Department of Energy, this assurance obligates the Applicant for the period during which Federal assistance is extended. In the case of any transfer of such service, financial aid, equipment, property, or structure, this assurance obligates the transferee for the period during which Federal assistance is extended. If any personal property is so provided, this assurance obligates the Applicant for the period during which it retains ownership or possession of the property. In all other cases, this assurance obligates the Applicant for the period during which the Federal assistance is extended to the Applicant by the Department of Energy.

Employment Practices

Where a primary objective of the Federal assistance is to provide employment or where the Applicant's employment practices affect the delivery of services in programs or activities resulting from Federal assistance extended by the Department, the Applicant agrees not to discriminate on the ground of race, color, national origin, sex, age, or disability, in its employment practices. Such employment practices may include, but are not limited to, recruitment, advertising, hiring, layoff or termination, promotion, demotion, transfer, rates of pay, training and participation in upward mobility programs; or other forms of compensation and use of facilities.

Subrecipient Assurance

The Applicant shall require any individual, organization, or other entity with whom it subcontracts, subgrants, or subleases for the purpose of providing any service, financial aid, equipment, property, or structure to comply with laws and regulations cited above. To this end, the subrecipient shall be required to sign a written assurance form; however, the obligation of both recipient and subrecipient to ensure compliance is not relieved by the collection or submission of written assurance forms.

Data Collection and Access to Records

The Applicant agrees to compile and maintain information pertaining to programs or activities developed as a result of the Applicant's receipt of Federal assistance from the Department of Energy. Such information shall include, but is not limited to the following: (1) the manner in which services are or will be provided and related data necessary for determining whether any persons are or will be

denied such services on the basis of prohibited discrimination; (2) the population eligible to be served by race, color, national origin, sex, age, and disability; (3) data regarding covered employment including use or planned use of bilingual public contact employees serving beneficiaries of the program where necessary to permit effective participation by beneficiaries unable to speak or understand English; (4) the location of existing or proposed facilities connected with the program and related information adequate for determining whether the location has or will have the effect of unnecessarily denying access to any person on the basis of prohibited discrimination; (5) the present or proposed membership by race, color, national origin, sex, age and disability in any planning or advisory body which is an integral part of the program; and (6) any additional written data determined by the Department of Energy to be relevant to the obligation to assure compliance by recipients with laws cited in the first paragraph of this assurance.

The Applicant agrees to submit requested data to the Department of Energy regarding programs and activities developed by the Applicant from the use of Federal assistance funds extended by the Department of Energy. Facilities of the Applicant (including the physical plants, buildings, or other structures) and all records, books, accounts, and other sources of information pertinent to the Applicant's compliance with the civil rights laws shall be made available for inspection during normal business hours on request of an officer or employee of the Department of Energy specifically authorized to make such inspections. Instructions in this regard will be provided by the Director, Office of Civil Rights, U.S. Department of Energy.

This assurance is given in consideration of and for the purpose of obtaining any and all Federal grants, loans, contracts (excluding procurement contracts), property, discounts or other Federal assistance extended after the date hereof, to the Applicants by the Department of Energy, including installment payments on account after such data of application for Federal assistance which are approved before such date. The Applicant recognizes and agrees that such Federal assistance will be extended in reliance upon the representations and agreements made in this assurance, and that the United States shall have the right to seek judicial enforcement of this assurance. This assurance is binding on the Applicant, the successors, transferees, and assignees, as well as the person(s) whose signatures appear below and who are authorized to sign this assurance on behalf of the Applicant.

The Applicant certifies that it has complied, or that, within 90 days of the date of the grant, it will comply with all applicable

requirements, of 10 C.F.R. 1040.5 (a copy will be furnished to the Applicant upon written request to DOE).

Applicant Certification

	,
Authorized Official: President, Chief Executive Officer or Authorized Designee	
Name and Title (Printed or Typed) and Telephone Number	
Signature and Date	

CERTIFICATIONS REGARDING LOBBYING; DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS; AND DRUG-FREE WORKPLACE REQUIREMENTS

Applicants should refer to the regulations cited below to determine the certification to which they are required to attest. Applicants should also review the instructions for certification included in the regulations before completing this form. Signature of this form provides for compliance with certification requirements under 10 CFR Part 601, "New Restrictions on Lobbying," and 10 CFR Part 1036, "Governmentwide Debarment and Suspension (Nonprocurement) and Governmentwide Requirements for Drug-Free Workplace (Grants)." The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of Energy determines to award the covered transaction, grant, or cooperative agreement.

1. LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

2. DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal,

- State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery. falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification;
- (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

3. DRUG-FREE WORKPLACE

This certification is required by the Drug-Free Workplace Act of 1988 (Pub.L. 100-690, Title V, Subtitle D) and is implemented through additions to the Debarment and Suspension regulations, published in the Federal Register on January 31, 1989, and May 25, 1990.

ALTERNATE I (GRANTEES OTHER THAN INDIVIDUALS)

- (1) The grantee certifies that it will or will continue to provide a drug-free workplace by:
 - (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
 - (b) Establishing an ongoing drug-free awareness program to inform employees about:
 - (1) The dangers of drug abuse in the workplace;
 - The grantee's policy of maintaining a drug-free workplace;
 - (3) Any available drug counseling, rehabilitation, and employee assistance programs; and
 - (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
 - (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);

- (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will:
 - (1) Abide by the terms of the statement; and
 - (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statue occurring in the workplace not later than five calendar days after such conviction;
- (e) Notifying the agency, in writing, within ten calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer or other designee on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification number(s) of each affected grant;
- (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted:
 - Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
 - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State or local health, law enforcement, or other appropriate agency;

(g)	Making a good faith effort to continue to maintai			n a	
	drug-free	workplace	through	implementation	of
	paragraphs (a),(b),(c),(d),(e), and (f).				

(2) The grantee may insert in the space provided below the
site(s) for the performance of work done in connection with the
specific grant:

Place of Performance: code)	(Street address,	city, coun	ity, state, zip
Check if there are where.	workplaces on fil	e that are i	 not identified

ALTERNATE II (GRANTEES WHO ARE INDIVIDUALS)

- (1) The grantee certifies that, as a condition of the grant, he or she will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity with the grant.
- (2) If convicted of a criminal drug offense resulting from a violation occurring during the conduct of any grant activity, he or she will report the conviction, in writing, within 10 calendar days of the conviction, to every grant officer or other designee, unless the Federal agency designates a central point for the receipt of such notices. When notice is made to such a central point, it shall include the identification number(s) of each affected grant.

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above certifications.

NAME OF APPLICANT	PR/AWARD NUMBER and/or PROJECT NAME
PRINTED NAME and TITLE OF AUTHORIZED RE	EPRESENTATIVE
SIGNATURE and DATE	

DISCLOSURE OF LOBBYING ACTIVITIES

Approved by OMB

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352

0348-0046

(See reverse for public burden disclosure.)

1. Type of Federal Action:	2. Status of Fede	ral Action:	3. Report Type:	
a. contract	a. bid/offer/application		a. initial filing	
b. grant	b. initial award		b. material change	
c. cooperative agreement	c. post-award		For Material Change Only:	
d. loan	•		year quarter	
e. loan guarantee			date of last report	
f. loan insurance				
4. Name and Address of Reporting E	ntity:	5. If Reporting Entity	n No. 4 is Subawardee, Enter Name	
Name and Address of Reporting E			ess of Prime:	
——	vardee , <i>if known.</i>	and Addit	ess of Filme.	
Tiel ,	, II KIIOWII.			
Congressional District, if known:		Congressional District, if known:		
6. Federal Department/Agency:		7. Federal Program Name/Description:		
			·	
		CFDA Number, if applicable:		
8. Federal Action Number, if known:		9. Award Amount, if	known:	
		\$		
10. a. Name and Address of Lobbyin		b. Individuals Perfor	_	
(if individual, last name, first name, MI):		(including address if different from No. 10a)		
		(last name	e, first name, MI):	
	Items 11 through 15	are deleted.		
	04 1100	Cianatura		
16 Information requested through this form is authorized by title disclosure of lobbying activities is a material representation of fact	upon which reliance was placed	Signature:		
by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and		Print Name:		
will be available for public inspection. Any person who fails to file	the required disclosure shall be	Title:		
subject to a civil penalty of not less than \$10,000 and not mor failure.	e man \$100,000 for each such	Telephone No.:	Date:	
Federal Use Only:			Authorized for Local Reproduction	
			Standard Form - LLL	

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Use the SF-LLL-A Continuation Sheet for additional information if the space on the form is inadequate. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

- 1. Identify the type of covered Federal action for which lobbying activity is and or has been secured to influence the outcome of a covered Federal action.
- 2. Identify the status of the covered Federal action.
- 3. Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
- 4. Enter the full name, address, city, state and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
- 5. If the organization filing the report in item 4 checks "Subawardee", then enter the full name, address, city, state and zip code of the prime Federal recipient. Include Congressional District, if known.
- 6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
- 7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
- 8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."
- 9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award loan commitment for the prime entity identified in item 4 or 5.
- 10. (a) Enter the full name, address, city, state and zip code of the lobbying entity engaged by the reporting entity identified in item 4 to influence the covered Federal action.
- 10. (b) Enter the full name of the individual(s) performing services, and include full address if different from 10(a). Enter Last Name, First Name, and Middle Initial (MI).

(Items 11 through 15 were removed from the form.)

16. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Information Resources Management Policy, Plans and Oversight, HR-4.3, Paperwork Reduction Project (1910-1400), U.S. Department of Energy, 1000 Independence Avenue, S.W., Washington, DC 20585; and the office of Management and Budget (OMB), Paperwork Reduction Project (0348-0046), Washington, DC 20503.

FINANCIAL ASSISTANCE PRE-AWARD INFORMATION SHEET

Avvondoor

Award	No.:_	DE-SC02-00CH12245	_ Amendment No.:_	A000	
A.	INTE	ELLECTUAL PROPERTY			
A	A.1.	For an award based on a proposal, it is DOE policy that, in consideration of the award, the Government shall obtain unlimited rights in the technical data contained in the proposal unless the awardee marks those portions of the technical information which he asserts as "proprietary data" or specifies those portions of such technical data which are not directly related to or will not be utilized in the work to be funded under the award. YES NO Will restrictions be placed on Government rights in the proposal technical data? () () If yes, identify the page number(s) of the proposal which contain technical data that is proprietary or is not directly related to or will not be utilized in the work to be funded under the award:			
	A.2.	IDENTIFICATION OF TECHNICAL DATA VIOLENTIFICATION O	OMPUTER SOFTW	ARE)	

permit the utilization of proprietary data in the award work or, if the use of proprietary data is permitted, may not be adequate to meet programmatic requirements. Use of data that is proprietary may prevent you from meeting the data requirements of the award (including delivery of data). Your attention is

particularly drawn to the use of LICENSED COMPUTER SOFTWARE.

	YES	NO Will limited rights data or restricted computer software be utilized in the award work?	()	()
		If yes, identify the limited rights data or restricted computer software utilized in the award work:	that	will	l be
			YES	<u>N</u>	<u>O</u>
	A.3	Do you intend to request an advance waiver of patent rights?	()	()
B.	<u>HUM</u>	AN RESEARCH			_
	B.1.	Does the research work involve the use of human subjects as defined in 10 CFR Part 745 and the most current DOE directive regarding research involving human subjects?	YES ()		
		If yes, indicate the name, title, and telephone number of a point of cont who can provide detailed information concerning this human subjects research project:	act(s)		
		Name:			
		Title:			
		Telephone No.:			
	B.2.	Will the research work involving human subjects involve more than one institution?	()	()
		If yes, the participating institutions have obtained DOE or DHHS approval to enter into a joint review arrangement, rely upon the review			
				A-4	

	of another qualified IRB, or make similar arrangements for avoiding duplication of effort pursuant to 10 CFR Part 745.114. () ()										
B.3	If an affirmative response was provided to B.1, complete one of the following as applicable:										
	The involvement of human subjects in the research activities will be in one or more of the exempt categories as described in 10 CFR Part 745.101(b). Provide a description and identify the exemption(s) by regulatory citation(s) below:										
	OR										
	The applicability of the provisions of the human subjects research policy described in 10 CFR Part 745.101 has been waived by the U.S. Department of Energy for the proposed research activities pursuant to 10 CFR Part 745.101(i).										
	OR										
	☐ CERTIFICATION REQUIRED BY 10 CFR PART 745.103(B)										
	The research involving human subjects has been reviewed and approved by an Institutional Review Board (IRB) on (insert date), as provided for in the current written Single Multiple Project Assurance No previously approved by DOE DHHS, and will be subject to continuing review by the IRB no less than once per year.										
	OR										
	☐ The research involving human subjects has not been reviewed by an IRB. The applicant fully understands that under no condition shall research covered by the policy codified at 10 CFR Part 745.103 be supported prior to receipt of the certification that the research has been reviewed and approved by the IRB.										

C.	TYPE OF BUSINESS
	The Awardee is a:
	State Government
	☐ Institution of Higher Education ☐ Hospital ☐ Individual ☐ Joint Venture
	☐For Profit Organization, specify: ☐Corporation ☐Partnership ☐Sole Proprietorship
	☐ Small Business ☐ Disadvantaged Business ☐ Woman-Owned Business ☐ 8(a)
	Other Nonprofit Organization Other, specify:
D.	SIMPSON-CRAIG AMENDMENT REPRESENTATION
	<u>YES NO</u>
	Is the applicant an organization described in section 501(c)(4) of the Internal Revenue Code of 1986? () ()
	If yes, complete the following representation:
	The applicant represents that it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 which, after December 31, 1995, has has not engaged in lobbying activities as defined in the Lobbying Disclosure Act of 1995.
E.	SOCIAL SECURITY NUMBER (SSN)
	If the Awardee <u>does not</u> have an Internal Revenue Service (IRS) assigned Employer Identification Number (EIN), awardee SSN is
F.	CONGRESSIONAL DISTRICT AND COUNTY
	For the principal place of performance, the Congressional District is and the county is

G.	PAYMENT INFORMATION (FOR NEW AWARDEES ONLY)									
	Financial	cial Institution Name								
	Address									
	Deposito	sitor Account Number								
	NOTE:	Please complete Enrollment Form.		entitled	ACH	VENDOR/Mis	scellaneous	Payment		
			-		C	Organization Na	me			
					S	ignature		Date		
			-							
			,	Typed Na	ime of	Authorized Rep	oresentative			
			;	Typed Tit	tle of A	authorized Repr	esentative			

This form is used for Automated Clearing House (ACH) payments with an addendum record that contains payment-related information processed through the Vendor Express Program. Recipients of these payments should bring this information to the attention of their financial institution when presenting this form for completion

PRIVACY ACT STATEMENT

The following information is provided to comply with the Privacy Act of 1974 (P.L. 93-579). All information collected on this form is required under the the provisions of 31 U.S.C. 3322 and 31 CFR 210. This information will be used by the Treasury Department to transmit payment data, by electronic means to vendor's financial institution. Failure to provide the requested information may delay or prevent the receipt of payments throught the Automated Clearing House Payment System.

	AGENCY INFORMATION	
FEDERAL PROGRAM AGENCY:	AGENCT IN ORMATION	
	GY CHICAGO OPERATIONS OF	FICE
AGENCY IDENTIFIER:	AGENCY LOCATION CODE (ALC):	ACH FORMAT:
DOE2	89-00-0701	LX CCD+ L CTX L CTP
ADDRESS:		
FINANCIAL SERVICES GROU		
9800 SOUTH CASS AVENUE,	ARGONNE, IL 60439	
CONTACT PERSON NAME:		TELEPHONE NUMBER:
KIMBERLI POWERS		630/252-2344
E-MAIL ADDRESS:	E COV	
KIMBERLI.POWERS@CH.DO	E.GOV	
	PAYEE/COMPANY INFORMATION	<u> </u>
NAME:		SSN OR TAXPAYER ID NO.:
ADDRESS:		
		· · · · · · · · · · · · · · · · · · ·
CONTACT PERSON NAME:		TELEPHONE NUMBER:
E-MAIL ADDRESS:		
E-MAIL ADDRESS.	•	
FIN	IANCIAL INSTITUTION INFORMAT	ION
NAME:		
ADDRESS:		
ACH COORDINATOR NAME:		TELEPHONE NUMBER:
ACH COOKSIIVA OKTAVIL.		recei none nomber.
NINE-DIGIT ROUTING TRANSIT NUMBER:		
DEPOSITOR ACCOUNT TITLE:		
DEPOSITOR ACCOUNT NUMBER:		LOCKBOX NUMBER:
TYPE OF ACCOUNT:		
CHECKING	SAVINGS L	OCKBOX
CAECKING		
SIGNATURE AND TITLE OF AUTHORIZED	OFFICIAL:	TELEPHONE NUMBER:
(May be same as ACH Coordinator)		

SIMPSON-CRAIG AMENDMENT REPRESENTATION

Check the appropriate block:

The applicant represents that it is an organization described in Section	
501(c)(4) of the Internal Revenue Code of 1986 which, after December 3	31,
1995, has has not engaged in any lobbying activities as defined in	ı the
Lobbying Disclosure Act of 1995.	
A 7° 4	
Applicant:	
Title:	
Cionature and Data.	
Signature and Date:	

CH NEPA Tracking Number:_____

CHI CAGO OPERATIONS OFFICE NATIONAL ENVIRONMENTAL POLICY ACT ENVIRONMENTAL EVALUATION NOTIFICATION FORM

Solicitation/Award No.	
Organization's Name:	
Title Of Proposed Research:	
Funding Source:	
Contractor Project Manager:	Si gnature:
Phone Number:	Date:
Contractor NEPA Reviewer:	Si gnature:
Phone Number:	Date:
For assistance in completing this for	rm, contact W. Sedgefield White at 630-252-
Description of Proposed Possesse	.h .

I. <u>Description of Proposed Research</u>:

II. Description of Affected Environment:

CH	NEPA	Tracking	Number	:
----	------	----------	--------	----------

III. Potential Environmental Effects:

NOTE: Attach explanation for each "yes" response. Additional information is important and could be significant in the decision making process.)

A.	Sensitive Resources:	Will	the	proposed	action	result	in	changes	and/or
	disturbances to a	ny of	the	following	resour	ces?			

		<u>Yes/No</u>
1.	Threatened/Endangered Species and/or Critical Habitats	
2.	Other Protected Species (e.g. Burros, Migratory Birds)	
3.	Wetlands	
4.	Archaeol ogi cal /Hi stori c Resources	
5 .	Prime, Unique or Important Farmland	
6 .	Non-Attainment Areas	
7.	Class I Air Quality Control Region	
8.	Special Sources of Groundwater	
	(e.g. Sole Source Aquifer)	
9.	Navi gable Air Space	
10.	Coastal Zones	
11.	Areas w/Special National Designation	
	(e.g. National Forests, Parks, Trails)	
12 .	Fl oodpl ai n	
13.	Natural Resource Damage Assessments	
14.	Exotic Organisms	
15.	Federal Noxious Weed Act	

B. Regulated Substances/Activities: Will the proposed action involve any of the following regulated substances or activities?

		Yes/No
16 .	Clearing or Excavation (indicate if greater	
	than 5 acres)	
17.	Dredge or Fill (under Clean Water Act section 404;	
	indicate if greater than 10 acres)	
18.	Noise (in excess of regulations)	==
19.	Asbestos Removal	
20.	PCBs	
21.	Import, Manufacture or Processing of Toxic Substances	
22.	Chemical Storage/Use	
23.	Pestici de Use	
24.	Hazardous, Toxic, or Criteria Pollutant Air Emissions	
25.	Li qui d Effl uent	
26.	Underground Injection	
27.	Hazardous Waste	
28.	Underground Storage Tanks	
29.	Radioactive (AEA) Mixed Waste	
30.	Radioactive Waste	
31.	Radi ati on Exposures	
32.	Surface Waste Protection	
33.	Pollution Prevention Act	
34.	Ozone Depleting Substances	
35.	Off Road Vehicles	
55.	orr wood venicies	

Yes

No

CH NEPA Tracking Number:_____

		Other 1 followi	Relevant Disclosures. Will the proposed action involve the					
	1	10110W	ring:	Yes/No				
		36.	A threatened violation of ES&H regulations/permit					
			requirements					
		37.	Siting/Construction/Major Modification of Waste					
		00	Recovery, or TSD Facilities					
		38. 39.	Disturbance of Pre-existing Contamination New or Modified Federal/State Permits					
		39. 40.	Public controversy					
		10.	(e.g. Environmental Justice Executive Order 12898					
			consideration and other related public issues)					
		41.	Action/involvement of Another Federal Agency					
			(e.g. license, funding, approval)					
		42 .	Action of a State Agency in a State with NEPA-type law.					
			(Does the State Environmental Quality Review Act Apply?)					
		43.	Public Utilities/Services					
		44.	Depletion of a Non-Renewable Resource					
		45. 46.	Extraordinary Circumstances Connected Actions					
		40. 47.	Is the proposed work bench-top research					
		48.	Will the proposed work be preformed in an existing					
		201	laboratory setting					
		49.	Is the proposed work a paper study rather than laboratory bench-top research					
(If yo	u have a	answered	yes to any question above, attach an explanation why "yes" was checked)					
NOTA	Оре	rations	nplete any information below. This information will be completed at the Office EPA COMPLIANCE REVIEW	? Chicago				
	A.	<u>DOE-</u> (CH Acquisition and Assistance Group Review:					
		Туре	d Name and Title:					
		Si gna	ature : Date:					
	В.	<u>DOE-</u> (CH NEPA Review:					
		dete	ion D Determination: Is the project/activity appropriate formination by the OM under Subpart D of the DOE NEPA Regulation liance with NEPA? (Circle one)					

CH NEPA Tracking Number:	
--------------------------	--

Indicate the recommendation and specific class of action from Appendix A-D to Subpart D (10 CFR 1021):

CX Category:

Si gnature:	Date:	
DOE- CH LGL- GL CONCURRE	NCE (if necessary)	
Typed Name and Title:_		
Si gnature:	Date:	

The preceding pages are a record of documentation required under DOE Final NEPA Regulation, 10 CFR Part 1021. 400 that establishes an action may be categorically excluded from further NEPA review. I have determined that the proposed action meets the requirements for the Categorical Exclusion referenced above. Therefore by my signature below, I have determined that the proposed action may be categorically excluded from further NEPA review and documentation.

Si gnature:		Date:	
O	Dr. W. Sedgefield White		

DOE-CH NEPA Compliance Officer Phone No.: 630-252-2101

U.S. Department of Energy Federal Assistance Budget Information

OMB Control No 1910-0400

Appendix L

OMB Burden Disclosure Statement

Public reporting burden for this collection of information is estimated to average 1.87 hours hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of Information Resources Management, AD-241.2 - GTN, Paperwork Reduction Project (1910-0400), U.S. Department of Energy, 1000 Independence Avenue, S.W., Washington, DC 20585; and to the Office of Management and Budget (OMB), Paperwork Reduction Project (1910-0400), Washington, DC 20503.

1. Program/Project Ide	entification	No.	2. F	rogram/P	roject Title					*	
DE-SC02-00ER											
3. Name and Address								4	l. Progran	n/Project S	Start Date
								5	. Comple	tion Date	
			S	ECTION	A - BU	DGET S	SUMMA	RY	7		
Grant Program Function			Es	timated U	nobligated	l Funds			New or B	evised Bud	daet
or Activity		deral og No.		ederal	_	Federal	 Fe	ederal		-Federal	Total
(a)	(b)		(c)		(d)		(e)	14011	(f)	(g)
1.	N.A	A	\$	NA	\$	NA	\$	NA	\$	NA	\$ NA
2.	NA	<i></i>		NA		NA		NA		NA	NA
3.	N <i>A</i>	1		NA		NA		NA		NA	NA
4.	NA	<u>.</u>		NA		NA		NA'		NA	NA
5. TOTALS			\$		\$		\$		\$		\$
			SEC	CTION E	B - BUD	GET CA	TEGOF	RIES	<u> </u>		
				Grant I	Program,	Function	or Activity				
6. Object Class Categories		(1)	(2)		(3)		(4)				Total (5)
a. Personnel		\$		\$		\$		\$		\$	
b. Fringe Benefits											
c. Travel											
d. Equipment			····								
e. Supplies											
f. Contractual											
g. Construction		NA		NA		N.	Α	NA			NA
h. Other											
i. Total Direct Charg	es										
j. Indirect Charges											
k. TOTALS		\$		\$		\$	······································	\$		\$	
7. Program Income		\$ NA		\$ NA		\$ NA		\$ NA		\$	NA

FEDERAL ASSISTANCE BUDGET INFORMATION

INSTRUCTIONS

- Item 1 Enter the Federal grant or agreement identification number for the current year as it appears in the official award, if known.
- Item 2 Enter the Program/Project official title as it appears in the award.
- Item 3 Enter name and address of the agency or office responsible for coordination and administration of the Program/Project.
- Item 4 Enter the official start date.
- Item 5 Enter the official completion date as of the latest official modification.

Section A. Budget Summary

Lines 1-4, Columns (a) and (b).

For applications pertaining to a single Federal assistance program (Federal Domestic Assistance Catalog number) and not requiring a functional or activity breakdown, enter on Line 1 under Column (a) the catalog program title and the catalog number in Column (b).

For applications pertaining to a single program requiring budget amounts by multiple functions or activities, enter the name of each activity or function on each line in Column (a), and enter the catalog number in Column (b). For applications pertaining to multiple programs where none of the programs require a breakdown by function or activity, enter the catalog program title on each line in Column (a) and the respective catalog number on each line in Column (b).

For applications pertaining to multiple programs where one or more programs require a breakdown by function or activity, prepare a separate sheet for each program requiring the breakdown. Additional sheets should be used when one form does not provide adequate space for all breakdown of data required. However, when more than one sheet is used, the first page should provide the summary totals by programs.

Lines 1-4, Columns (c) through (g).

For new applications, leave Columns (c) and (d) blank. For each line entry in Columns (a) and (b), enter in Columns (e), (f), and (g) the appropriate amounts of funds needed to support the project.

For continuing assistance program applications, submit these forms before the end of each funding year if required by Program Manager. Enter in Columns (c) and (d) the estimated amounts of funds which will remain unobligated at the end of the funding period only if the award instructions provide for this. Otherwise, leave these columns blank. Enter in Columns (e) and (f) the amount of funds needed for the upcoming period. The amount(s) in

THIS REPORT IS REQUIRED IN ACCORDANCE WITH 42 U.S.C. 7254 AND 40 U.S.C. 471 <u>ET SEQ.</u> FAILURE TO REPORT MAY RESULT IN CONTRACT TERMINATION OR PENALTIES AS PROVIDED BY LAW. Column (g) should be the sum of the amounts in Columns (e) and (f).

For supplemental awards and changes to existing awards, do not use Columns (c) and (d). Enter in Column (e) the amount of the increase or decrease of Federal funds and enter in Column (f) the amount of increae or decrease of non-Federal funds. In Column (g) enter the new total budgeted amount (Federal and non-Federal) which includes the total previous authorized budgeted amounts plus or minus, as appropriate, the amounts shown in Columns (e) and (f). The amount(s) in Column (g) should not equal the sum of the amounts in Columns (e) and (f).

Line 5 - Show the totals for all columns used.

Section B. Budget Categories

In the column headings (1) through (4), enter the titles of the same programs, functions, and activities shown on Lines 1-4, Column (a), Section A. When additional sheets were prepared for Section A, provide similar column headings on each sheet. For each program, function or activity, fill in the total requirements for funds (both Federal and non-Federal) by object class categories.

- Item 6a-h

 Show the estimated amount for each direct cost budget (object class) category for each column with program, function or activity heading.
- Item 6i Show the totals of Lines 6a to 6h in each column.
- Item 6j Show the amount of indirect cost.
- Item 6k
 Enter the total of amounts on Line 6i and 6j.
 For all applications for new and continuation
 awards, the total amount in Column (5), Line
 6k, should be the same as the total amount
 shown in Section A, Column (g), Line 5. For
 supplemental awards and changes to awards,
 the total amount of the increase or decrease as
 shown in Columns (1) (4), Line 6k, should be
 the same as the sum of the amounts in Section
 A, Columns (e) and (f) on Line 5. When
 additional sheets were prepared, the last two
 sentences apply only to the first page with
 summary totals.
- Item 7 Enter the estimated amount of income, if any, expected to be generated from this project. Do not add or subtract this amount from the total project amount. Show under the program narrative statement the nature and source of income. The estimated amount of program income may be considered by the Program Manager in determining the total amount of the award.

BUDGET EXPLANATION PAGE

Federal Assistance Budget Information DOE F 4600.4

6. a. Personnel

	Name	Hours	Hourly Wages	Total Cost
Ex:	Joe Smith	230	\$18.75	\$4,312.50

	Hourly Wages/Sa					_	
	Other explain:						
b. Fri	nge Benefits or Lab	or Overhead, j	provide the bel	low lis	sted items.		
	In accordance wi	th Federal agen	cv approved ra	ites. (Provide co	ny of agree	emen
	In accordance wi	th Federal agen	cy approved ra	ites. (Provide co	py of agree	emen
	In accordance wi	· ·	cy approved ra	%	FY 2002		emen
		FY 2000		%			emen
	% %	FY 2000 FY 2001		% %	FY 2002 FY 2003	etc	
	%	FY 2000 FY 2001 or overhead and		% %	FY 2002 FY 2003	etc	

6. c. Travel

From City	To City	# of persons	# of days
Ex: San Jose, Ca	Chicago, IL	4	1 week each person

Transportation cost	\$ per each round t	rip
Subsistence cost	\$ per day	
Car rental cost	\$ 	

Travel cost estimates are based on quotes from travel agencies	
Travel cost estimates are based on past experience of similar trips	
Travel cost estimate is based on	

- **6. d. Equipment,** provide the following information, and itemized list: and
- **6. e. Material and Supplies,** provide the following information, and itemized list:

	Item or Groups of Items	# of items	Cost Each
Ex:	Computer	2 ea.	\$500 ea.
Ex:	Computer supplies		\$600 total

Cost estimates are based u	upon quotes from vendors or catalog prices
Cost estimates are based of	on past experience of purchases of similar or like item
Cost estimate is based on	

6. f. Contractual

Subcontractors are to provide:

Federal Assistance Budget Information Form DOE F 4600.4, Appendix B of the solicitation.

Budget explanation page, Appendix M of the solicitation.

Pre-Award information sheet AA-47, Appendix H of the solicitation.

6. h. Other

Provide a detailed itemized list of all costs listed in the "Other" cost element, together with the basis for the cost estimate.

6. j. Indirect Charges / G&A

Provide the exact information as stated at 6.b. above.

Model Indirect Cost Rate Proposal

This model is to be used as a guide in preparing an indirect cost rate submission. The formats included in this model are not mandatory, however the basic data contained in each of the schedules listed below is required for the proposal to be considered adequate. Please note that depending on the size of a firm or organization, complexity of the accounting system, and type of business, some of the schedules may not be required.

The proposal should be prepared on the basis of the firm or organization's fiscal year.

List of required schedules:

Schedule A - General and Administrative Expenses (G&A)

Schedule B - Overhead Expenses

Schedule C - Bases Used to Allocate Indirect Expenses

Schedule D - Claimed Rates for Each Expense Pool

Schedule E - Facilities Capital Cost of Money Factors Computation

Schedule F - Reconciliation of Books of Account and Claimed Direct Cost

Schedule G - Reconciliation of Total Payroll to Total Labor Distributed

General and Administrative Expenses (G&A) Fiscal Year Ended 3/31/90

Schedule of Actual Expenses, Adjustments and Claimed Costs

	Expenses Per General			Claimed	
Accounts	Ledger	Adjustments		Costs	Notes
Salaries & Wages	\$ 90,007	\$		\$ 90,007	
Legal Fees	1,744			1,744	
Audit Fees	20,585			20,585	
Other Fees	11,776			11,776	
Travel	12,987	(1,295)		11,692	(1)
Entertainment	484	(484)		0	(2)
Advertising & Promotion	354	(287)		67	(3)
Bad Debts	3,018	(3,018)		0	(2)
Tech. Publications	1,500			1,500	
Periodicals	4,935			4,935	
Conventions & Seminars	7,936	(319)		7,617	(1)
Interest Expense	1,001	(1,001)		0	(2)
Holiday	2,322			2,322	
Vacation	5,812			5,812	
Sick Leave	987			987	
Personal Absence	1,082			1,082	
Employee FICA	3,815			3,815	
FUI	183			183	
SUI	910			910	
Workmen's Compensation	516			516	
Health Insurance	8,912			8,912	
Life Insurance	1,087			1,087	
Pension Plan	12,318	(1,883)		10,435	(4)
Tuition Assistance	912			912	
Miscellaneous	2,445			2,445	
SUBTOTAL	197,628	(8,287)		189,341	
Occupancy Allocation-Sch C	23,151			23,151	
SUBTOTAL	220,779	(8,287)		212,492	
IR&D/B&P					
IR&D	9,724			9,724	
IR&D	14,287			14,287	
IR&D	11,822	(715)	@77.74%	11,107	(5)
B&P	6,485			6,485	
B&P	9,525			9,525	
B&P	7,882	(477)	@77.74%	7,405	(5)
IR&D/B&P Overceiling-Sch J		(586)		(568)	(6)
GRAND TOTAL	<u>280,504</u>	(\$ 10,047)		<u>270,457</u>	

Notes Explaining Adjustments:

- (1) Expense of President, Vice President and wives on a personal trip not claimed.
- (2) Unallowable cost per government procurement regulation FAR 31.2.
- (3) Unallowable promotion expense; balance claimed is help-wanted employment advertisement.
- (4) Employer contributions to pension plan in excess of that approved and considered allowable by the ACO.
- (5) Overhead on IR&D/B&P labor is shown at both the General Ledger rate of 82.75% and the claim rate of 77.74%.
- (6) See Schedule J for computation of allowable IR&D/B&P costs.

Overhead Expenses Fiscal Year Ended 3/31/90

Schedule of Actual Expenses, Adjustments and Claimed Costs

Expenses Per

	General		Claimed	
Accounts	Ledger	Adjustments	Costs	Notes
Salaries & Wages	\$ 33,060	\$	\$ 33,060	
Postage & Handling	6,235		6,235	
Office Supplies	6,461		6,461	
Small Equipment	878		878	
Temp. Clerical Help	1,816		1,816	
Other Outside Services	30,281		30,281	
Relocation	1,216	(777)	439	(1)
Business Meals	2,702		2,702	
Telephone Expense - Local	1,814		1,814	
Telephone-Long Distance	43,738		43,738	
Telecopier	2,434		2,434	
Equipment Rent	27,151		27,151	
Recruitment	286		286	
Dues/Memberships	2,112	(500)	1,612	(2)
Insurance	737		737	
Depreciation/Amortization	2,824		2,824	
Repairs & Maintenance	1,681		1,681	
Holiday	20,181		20,181	
Vacation	25,440		25,440	
Sick Leave	14,318		14,318	
Severance Pay	32,419	(23,023)	9,396	(3)
Employer FICA	23,612		23,612	
FUI	1,210		1,210	
SUI	5,813		5,813	
Workmen's Compensation	3,311		3,311	
Health Insurance	31,097		31,097	
Life Insurance	6,833		6,833	
Pension Plan	58,320	(8,612)	49,708	
Miscellaneous	612		612	
SUBTOTAL	388,592	(\$ 32,912)	355,680	
Occupancy Allocation-Sch C	154,932		154,932	
SUBTOTAL	543,524	(32,912)	510,612	
GRAND TOTAL	543,524	(\$ 32,912)	510,612	

Notes Explaining Adjustments:

- (1) Moving charges in excess of those allowable by FAR 31.2.
- (2) Membership fees and tennis dues of one individual not allowable as per FAR 31.2.
- (3) Severance pay in excess of allowable as per direction of ACO.
- (4) Employer contributions to pension plan I excess of that approved and considered allowable by ACO.

Bases Used to Allocate Indirect Expenses Fiscal Year Ended 3/31/90

<u>Pool</u>	General and Administrative Expenses - Schedule A:
<u>Base</u>	Total cost input (excludes G&A, IR&D, B&P, and Cost of Money), see Schedule E.
<u>Pool</u>	Overhead Expenses - Schedule B:
<u>Base</u>	Straight time direct labor dollars of all contracts and projects including la bor costs of IR&D/B&P projects, see Schedules E and H.
<u>Pool</u>	Occupancy Expenses - Schedule C:
<u>Base</u>	Square feet assigned to each activity
<u>Pool</u>	Cost of Money (Overhead) - Schedule F:
<u>Base</u>	Straight time direct labor dollars of all contracts and projects includ ing labor costs of IR&D/B&P projects.
<u>Pool</u>	Cost of Money (G&A) - Schedule F:
Base	Total cost input, (excludes G&A, IR&D, B&P, and Cost of Money.)

Claimed Rates for Each Expense Pool Fiscal Year Ended 3/31/90

	General Ledger	Adjustments	Claimed Costs	
Overhead				
Overhead Base:				
Contract Labor - Schedule H	\$633,012		\$633,012	
IR&D Labor - Schedule H	14,287		14,287	*
B&P Labor - Schedule H	<u>9,525</u>		<u>9,525</u>	*
Total Labor	<u>\$656,824</u>		<u>\$656,824</u>	
Overhead Pool: - Schedule B	\$543,524	(32,912)	\$510,612	
Overhead Rate	82.75%		77.74%	
General & Administrative Expense Rate (G&G&A Base Contract direct costs - Schedule				
Labor			\$633,012	
Travel			34,563	
Material			842,981	
Other direct costs			172,105	
Subcontracts			944,841	
Total direct costs			\$2,627,502	
Overhead - Schedule B Less: IR&D/B&P Overhead tra	nsferred to G&A:		\$543,524	**
IR&D Overhead @ General	Ledger Rate 82.7	5% X 14,287	(11,822)	***
B&P Overhead @ General I			(7,882)	***
Total Cost Input			<u>\$3,151,322</u>	****
G&A Pool Total Claimed G&A Expenses - Scho	edule A		<u>\$ 270,457</u>	****
G&A Rate			8.58%	

G&A Rate

Explanatory Comments.

- * The IR&D and B&P labor is included in the overhead base in order to allocate a proportionate share of overhead to the labor as required by FAR 31.2. The IR&D/B&P labor and the associated overhead is normally claimed as a part of the G&A expense.
- ** The claimed G&A base must include both the Schedule B claimed overhead (\$510,612) plus overhead costs incurred but not claimed (\$32,912).
- *** Overhead on the IR&D/B&P labor at the 82.75% rate is added to the G&A pool (Schedule A) and deducted from the G&A base.
- **** In summary, the total cost input base consists of contract direct costs plus overhead (claimed and unclaimed) less overhead on IR&D/B&P transferred to the G&A pool. The base does not include IR&D/B&P direct labor or other IR&D/B&P direct costs which are recovered through the G&A pool.

Form CASB- CMF									SCHEDULE E
Period	Rate	<u>Mo.</u>	COM						
Apr-Jun 89	9.75	3/12	2.438		FACILITIES C	ΡΔΡΙΤΔΙ			
Jul-Dec 89	9.125	6/12	4.563	COST OF N		ORS COMPUTAT	ΓΙΟΝ		
Jan-Mar 90	8.5	3/12	2.125	COST OF	MONETTACIC	NS COMI OTAL	ITON		
			* 9.126						
CONTRA	CTOR	•			ADI	DRESS:			
CONTINA	CION				ADI	JKESS.			
BUSINES	SC LINI	т.							
DUSINE	oo UNI	11.							
COST AC	COUNT	ING	1. Applicable Cost of	2. Accumulation &	3. Allocation of	4. Total Net Book	5. Cost of Money	6. Allocation Base	7. Facilities Capital
PE	RIOD:		Money Rate 9.126% *	Direct Distribution	Undistributed	Value	for the Cost	for the Period	Cost of Money
			T =	of MVB			Accounting Period		Factors
			Recorded	62,761	Basis of	Columns	Columns	In Unit(s)	Columns
	ess Unit		Leased Property	156,000	Allocation	2+3	1 x 4	of Measure	5/4
	cilities		Corporate or Group						
Ca	apital		Total	218,761					
			Undistributed	180,000					
			Distributed	38,761					
			Overhead	30,345	156,600	186,945	17,061	656,824	.02597
			Less: Cost of Mon	ey on IR&D/B&P Labo	r		(618)	23,812	.02597
							16,443		
	RHEAD								
PC	OOLS								
	3&A		G&A	8,416	23,400	31,816	2,904		
EXI	PENSE		Add: Co	ost of Money on IR&D/I	B&P Labor		618		
PC	OOLS						3,522	322	.00112
TO	OTAL			38,761	180,000	218,761	19,965		

Reconciliation of Books of Account and Claimed Direct Costs Fiscal Year Ended 3/31/90

	Amounts per		Amount	
Description	General Ledger	Adjustments	Claimed	Notes
DIRECT COSTS				
Direct Labor	\$ 656,824	\$	\$ 656,824	
Travel	35,173	(1,687)	33,486	(1)
Material	843,192		843,192	
Other Direct Cost	187,493	(3,183)	184,310	(2)
Subcontracts	944,841		944,841	
Total Direct Cost	\$ 2,667,523	\$ (4,870)	\$2,662,653	
•	(0.1.1.1.77)			

(Schedule H)

Notes Explaining Adjustments:

- (1) Travel Costs of first class airfare in excess of coach on contract N00039-88-C-0873.
- (2) ODGS Overtime premium not allowable by terms of contract N00039-88-C-0873.

^{*} Includes IR&D/B&P direct costs.

SCHEDULE G

RECONCILIATION OF TOTAL PAYROLL TO TOTAL LABOR DISTRIBUTED FISCAL YEAR ENDED 3/31/90

Account	Expenses
	Per General
	Ledger
Direct Labor	\$656,824
G&A Wages	90,007
G&A Holiday Wages	2,322
G&A Vacation Wages	5,812
G&A Sick Leave	987
G&A Personal Absence	1,082
Overhead Wages	33,060
Overhead Holiday Wages	20,181
Overhead Vacation	25,440
Overhead Sick Leave	14,318
Occupancy Wages	23,280
Overtime Premium (Included in ODC's)	270
TOTAL DISTRIBUTION	\$873,583
1st Quarter	\$220,375
2nd Quarter	220,132
3rd Quarter	229,101
4th Quarter	212,061
+ Prior Year Accrual	15,128
- Current Year Accrual	23,214
TOTAL	\$873,583

(Non-Proprietary)

STATEMENT OF WORK (Example)

Approach used, Check one: (see Section 1.3)

Substantially similar to the CAP process described in Appendix A.

Based on the CAP process but with important modifications.

Alternative approaches.

1. Statement of Work

Example - The applicant shall provide to SBIR Phase II financial assistance award recipients,, individualized assistance which will lead to etc., . The work is directed toward successful commercialization of technology etc. etc.

2. Description

The work to be performed consists of the following tasks:

- 2.1 Example -Forecasting description etc.
- 2.2 Example Business Plans description etc.
- 2.3 Etc.
- 2.4 Etc.

3. Performance Schedule

- Task 2.1 completed two months after start of work
- Task 2.2 and 2.3 completed four months after start of work
- Task 2.4 completed five months after start of work.

4. Reporting Requirement

Example The applicant shall provide reports as required by the Federal Assistance Reporting Checklist. Or

Example The applicant shall provide reports as required by the Federal Assistance Reporting Checklist, further, Informal Technical Progress Reports will be provided for Tasks 2.2 and 2.3, which are important milestones.

5. Deliverables

U.S. DEPARTMENT OF ENERGY NOTICE OF FINANCIAL ASSISTANCE AWARD

Under the authority of Public Law 95-91 Department of Energy Organization Act subject to legislation, regulations and policies applicable to (cite legislative program title): Office of Computational and Technology Research (OCTR)

1. PROJECT TITLE XXX	PROJECT TITLE XXX				2. INSTRUMENT TYPE ☐ GRANT ☐ COOPERATIVE AGREEMENT				
-	, zip code, area code and telephon	ne No.)	4. INST	RUMENT NO		COC		5. AMENDME	
XXX	, zip code, area code and telephon		DE-FC02-01EEXXXXX A000						
			6. BUD From: X	GET PERIOD	To: XXX			JECT PERIOD XXX To:	XXX
				PE OF AWARI ☑ NEW ☐ REVISION	□ C		UATION	RENE	
8. RECIPIENT PROJECT DIR XXX	8. RECIPIENT PROJECT DIRECTOR (Name and telephone No.) XXX						MENT ne, address.	, zip code, telepho	
9. RECIPIENT BUSINESS OFFICER (Name and telephone No.) XXX				XXX, Cont	ract Special	ist		Operations C	
11. DOE PROJECT OFFICER	(Name and telephone No.)			-	Cass Avent		Cincago	Operations C	THEC
XXX			1	Argonne, Ill	linois 6043	9		(630) 252-	
13. RECIPIENT TYPE									
State Gov't	☐ Indian Tribal	Gov't	Hospital		For P		zation	Individ	ual
☐ Local Gov't	Institute of H Education	_	Other N	onprofit nization	□ C [] P	☐ SP	ОТНЕ	R (Specify)
14. ACCOUNTING AND APP	ROPRIATION DATA						15. EMPLO	OYER I.D. NO./S	SSN
a. Appropriation Symbol	b. B&R Number	c. FT/AFP/OC		d. CFA Nun	nber				
XXX	XXX	XXX			N/A			XXX	
16. BUDGET AND FUNDING	INFORMATION					ı			
a. Current Budget Period Int	formation		b. Cumulative DOE Obligations						
(1) DOE Funds Obligated	This Action	\$ <u>0.00</u>	(1) This Budget Period \$ 0.00						
(2) DOE Funds Authorized	d for Carry Over	\$ <u>0.00</u>	[Total of lines a.(1) and a.(3)]						
(3) DOE Funds Previously Ob	ligated in This Budget Period	\$ <u>0.00</u>	(2) Prior Budget Periods \$ 0.00				\$ <u>0.00</u>		
(4) DOE Share of Total A	pproved Budget	\$ <u>0.00</u>							
(5) Recipient Share of Tot	al Approved Budget	\$ <u>0.00</u>	(3) Project Period to Date \$ <u>0.0</u>				\$ <u>0.00</u>		
(6) Total Approved Budge	t	\$ <u>0.00</u>	[To	otal of lines b.(1) and b.(2)]				
17. TOTAL ESTIMATED	-	<u>N/A</u>							
	nated cost of the project. It is not T TERMS AND CONDITION	•	or an authori	zation to exper	nd funds in this	amoun	it).		
	ists of this form plus the follo								
a. Special terms and co	•	ownig.							
b. Applicable program		N/A		(I	Date)				
c. DOE Assistance Rules,	10 CFR Part 6000, as amended								
d. Application/proposal datedXXX,				as submi	tted	with c	hanges as	negotiated	
19. REMARKS See Page No. 2 of this N	Notice of Financial Assistance Awa	ard.							
XXX To be filled at av				, pp.pp. pr.					
20. EVIDENCE OF RECIPIENT ACCEPTANCE				ARDED BY					
(Signatu	re of Authorized Recipient Officia	l) (Date)	(Signature of Authorized Recipient Official) (Date)				(Date)		
	(Name)		(Name)						
	(Title)		(Title)						

Amendment No. A000 to Cooperative Agreement No. DE-FC02-01ERXXXX Page No. 2 of 2

19. REMARKS (continued)

The following terms and conditions, attached hereto, are made a part hereof:

- a. Federal Assistance Budget Information Form DOE F 4600.4;
- b. Statement of Work;
- Special Terms and Conditions for Research Financial Assistance Awards, coded SPRG-1299/APM;
- d. Additional Special Provisions;
- e. Federal Assistance Reporting Checklist, dated May 26, 2000; and
- f. Intellectual Property Provisions Non Research and Development Large and Small Business, Nonprofit Organizations Educational Institutions, and Others, coded NRD-498.

All references to the terms "grant(s)" or "contact(s)" shall be read as "cooperative agreement" or "agreement;" the terms "grantee" or "contractor" shall be read as "participant, recipient or awardee;" the terms "subgrant" shall be read as "subaward;" and the terms "subcontract" or "contact" awarded under a grant shall be read as "contract" under a cooperative agreement.

 $\boldsymbol{BUDGET\ PAGE}$ (To be inserted here, DOE F 4600.4)

(Non-Proprietary)

STATEMENT OF WORK (Example)

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Example The applicant shall provide reports as required by the Federal Assistance Reporting Checklist, further, Informal Technical Progress Reports will be provided for Tasks 2.2 and 2.3, which are important milestones.

5. Deliverables

Special Terms and Conditions for Financial Assistance Awards

The requirements of this attachment take precedence over all other requirements of this award found in regulations, the general terms and conditions, DOE orders, etc., except requirements of statutory law. Any apparent contradiction of statutory law stated herein should be presumed to be in error until recipient has sought and received clarification from the Contracting Officer.

1. PAYMENT OFFICE

CR-54/CHO Account Payable Division U. S. Department of Energy P.O. Box 500 Germantown, MD 20874-0500

2. FINANCE OFFICE

U. S. Department of Energy Chicago Operations Office Financial Services Group 9800 South Cass Avenue Argonne, Illinois 60439

3. PAYMENT - Advance Payment under this award will be made by:

++								
	Department	of Heal	th & H	uman	Service	s (DHHS)	Payment	
++	Management	System	(PMS),	form	nerly DO	E Letter	of Credit	_

The recipient shall request cash only as needed for immediate disbursements, shall report cash disbursements in a timely manner, and shall impose the same standards of timing and amount, including reporting requirements, on secondary recipients.

An original Request for Advance or Reimbursement, SF 270, shall be submitted as necessary to the Payment Office specified in Section 1. above, and one copy of the SF 270 shall be submitted to the Contract Specialist specified in Block 12 of the Notice of Financial Assistance Award (DOE F 4600.1). The timing and amount of advances shall be as close as is administratively feasible to the actual disbursements. Such requests shall not be made in excess of reasonable estimates of cash outlays for a 30 day period.

Payment under this award will be accomplished by the Payment Office via ACH, an electronic funds transfer. A completed "Automated Clearing House (ACH) Vendor Miscellaneous Payment Enrollment Form" must be on file with the Finance Office prior to processing your payment.

4. DECONTAMINATION AND/OR DECOMMISSIONING D&D COSTS

Notwithstanding any other provisions of this Agreement, including but not limited to FAR 31.205-31, when applicable, as incorporated by Financial Assistance Rule 600.127(a), the Government shall not be $1 \hspace{1.5cm} \text{SPRG-}1299/\text{APM}$

responsible for or have any obligation to the recipient for (i) Decontamination and/or Decommissioning (D&D) of any of the Recipient's facilities, or (ii) any costs which may be incurred by the Recipient in connection with the D&D of any of its facilities due to the performance of the work under this Agreement, whether said work was performed prior to or subsequent to the effective date of this Agreement.

5. FEDERALLY-OWNED PROPERTY

If you acquire federally-owned property under this award whether fabricated, furnished or purchased with Capital Equipment Funds, then a listing of such property shall be submitted on DOE F 4300.3, Summary Report of DOE-Owned Plant & Capital Equipment, to the Contracting Officer within 45 days after August 31 of each year and within 30 days after the project period ends. The report must separately identify items which were fabricated, furnished, or purchased with Capital Equipment funds under this award.

Any Capital Equipment funds and the equipment to be purchased, fabricated, or furnished with such funds are indicated on Page No. 2 of the Notice of Financial Assistance Award.

6. NOTICE REGARDING THE PURCHASE OF AMERICAN-MADE EQUIPMENT AND PRODUCTS - SENSE OF CONGRESS

It is the sense of the Congress that, to the greatest extent practicable, all equipment and products purchased with funds made available under this award should be American-made.

7. NOTICE REGARDING UNALLOWABLE COSTS AND LOBBYING ACTIVITIES

Recipients of financial assistance are cautioned to carefully review the allowable cost and other provisions applicable to expenditures under their particular award instruments. If financial assistance funds are spent for purposes or in amounts inconsistent with the allowable cost or any other provisions governing expenditures in an award instrument, the government may pursue a number of remedies against the recipient, including in appropriate circumstances, recovery of such funds, termination of the award, suspension or debarment of the recipient from future awards, and criminal prosecution for false statements.

Particular care should be taken by the recipient to comply with the provisions prohibiting the expenditure of funds for lobbying and related activities. Financial assistance awards may be used to describe and promote the understanding of scientific and technical aspects of specific energy technologies, but not to encourage or support political activities such as the collection and dissemination of information related to potential, planned or pending legislation

8. ADDITIONAL PROVISIONS

If the appropriation symbol contained in Block 14.a. of the Notice of Financial Assistance Award for this award is listed below, paragraph 8.a. is applicable to this award, otherwise paragraph 8.b. applies:

89X0213.91 89X0215.91 89X0234.91 89X0235.91

a. Department of Interior and Related Agencies Appropriations Act:

1. Lobbying Restriction (Interior Act, 2000)

The awardee agrees that none of the funds obligated on this award shall be made available for any activity or the publication or distribution of literature that in any way tends to promote public support or opposition to any legislative proposal on which Congressional action is not complete. This restriction is in addition to those prescribed elsewhere in statute and regulation.

2. Compliance With Buy American Act

In accepting this award, the recipient agrees to comply with sections 2 through 4 of the Act of March 3, 1933 (41 U.S.C. 10a-10c, popularly known as the "Buy American Act"). The recipient should review the provisions of the Act to ensure that expenditures made under this award are in accordance with it.

b. Energy & Water Development Appropriations Act:

Lobbying Restriction (Energy and Water Act, 2000)

The awardee agrees that none of the funds obligated on this award shall be expended, directly or indirectly, to influence congressional action on any legislation or appropriation matters pending before Congress, other than to communicate to Members of Congress as described in 18 U.S.C. 1913. This restriction is in addition to those prescribed elsewhere in statute and regulation.

9. REPORTING

Failure to comply with the reporting requirements contained in this award will be considered a material noncompliance with the terms of the award. Noncompliance may result in a withholding of future payments, suspension or termination of the current award, and withholding of future awards. A willful failure to perform, a history of failure to perform. or of unsatisfactory performance of this and/or other financial assistance awards, may also result in a debarment action to preclude future awards by Federal agencies.

ADDITIONAL SPECIAL PROVISIONS

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ADDITIONAL SPECIAL PROVISIONS

1. FEE

No fee shall be paid to the Recipient or any subaward for performance under this Agreement.

2. STATEMENT OF SUBSTANTIAL INVOLVEMENT- ROLES AND RESPONSIBILITIES

DOE ROLES AND RESPONSIBILITIES: DOE may provide technical direction to the recipient as follows: (1) redirect the work effort; (2) shift work emphasis between work areas or tasks; (3) require pursuit of certain lines of inquiry; (4) fill in details or otherwise provide technical guidance to the recipient in order to accomplish the tasks and requirements stated in the financial assistance application incorporated into this Agreement. DOE technical direction shall not impose tasks or requirements upon the recipient additional or different from the tasks and requirements stated in the financial assistance application incorporated into this Agreement. To be valid, technical direction must be issued in writing. Technical direction may not: (1) constitute an assignment of additional work outside the tasks and requirements stated in the financial assistance application incorporated into this agreement; (2) in any manner cause an increase or decrease in the total estimated project cost or the time required for project performance; (3) change any of the expressed terms and conditions of the Agreement; or (4) accept non-conforming work.

DOE will actively monitor the recipient's activities. DOE will actively collaborate with the recipient in evaluating and setting milestones.

RECIPIENT ROLES AND RESPONSIBILITIES: The recipient shall provide all personnel, facilities, equipment, supplies and services, and otherwise do all things necessary for, or incident to, conducting the statement of work. The recipient is responsible for the overall management of the effort necessary for timely and professional execution of the work. The recipient shall proceed promptly with the performance of technical directions duly issued by the DOE Project Officer in the manner described in DOE ROLES AND RESPONSIBILITIES, above, and which are within the DOE Project Officer's authority. The recipient shall immediately cease performance of any technical direction upon receipt of a written instruction to that effect from the Contracting Officer. If, in the opinion of the recipient, any technical direction issued by the DOE Project Officer is not within the authorities defined in DOE ROLES AND RESPONSIBILITIES, above, the recipient shall not proceed but shall notify the Contracting Officer in writing within five working days after the receipt of any such technical direction and shall request the Contracting Officer to rescind such direction or mutually agree to modify the agreement accordingly. The Contracting Officer shall have the authority to make the final determination with respect to technical

direction. If the recipient disputes the determination and cannot informally resolve the dispute with DOE, the recipient shall follow the procedures set forth in 10 CFR 600.22. The only persons authorized to give Technical direction to the recipient under this Agreement are the Contracting Officer and any DOE Project Officer as listed in Block 11 of the Notice of Financial Assistance Award. Any action taken by the recipient in response to any direction given by any person other than the Contracting Officer or DOE Project Officer shall not be binding upon the Government.

DURATION OF SUBSTANTIAL INVOLVEMENT: The substantial involvement by DOE under this Agreement will remain in effect for the term of the Agreement, unless otherwise amended.

This statement of substantial involvement does not increase DOE's liability under this Agreement."

3. TECHNICAL DIRECTION

- A. The work to be performed by the Participant under this Cooperative Agreement is subject to the surveillance and written Technical Direction of a "DOE Project Officer," identified in block 11 of the face page. The term "Technical Direction" is defined to include, without limitation, the following:
 - Directions to the Participant which redirects the work effort, shifts work emphsis
 between work areas or tasks, require pursuit of certain lines of inquiry, fill in
 details or otherwise provide technical guidance to the Participant in order to
 accomplish the tasks and requirements stated in the Statement of Work as
 contained in the agreement.
 - 2. Provision of information to the Participant which assists in the interpretation of drawings, specifications or technical portions of the Statement of Work as contained in the Agreement.
 - 3. Review and, where required by the Cooperative Agreement, approval of technical reports, drawings, specifications or technical information to be delivered by the Participant to DOE under the Cooperative Agreement.
 - 4. The DOE Project Officer shall monitor the Participant's performance with respect to compliance with the requirements of this Cooperative Agreement.
- B. Technical direction and management surveillance shall not impose tasks or requirements upon the Participant additional to or different from the tasks and requirements stated in the Statement of Work of this Agreement. The Technical Direction to be valid:
 - 1. Must be issued in writing consistent with the tasks and requirements stated in the Statement of Work of this Agreement; and

2. May not:

- a. constitute an assignment of additional work outside the tasks and requirements stated in the Statement of Work of this Agreement;
- b. in any manner cause an increase or decrease in the total estimated project cost or the time required for project performance;
- c. change any of the expressed terms, conditions or specification of the Cooperative Agreement; or
- d. accept non-conforming work.
- C. The Participant shall proceed promptly with the performance of Technical Directions duly issued by the DOE Project Officer in the manner prescribed by paragraph B. above and which are within his authority under the provisions of paragraph A. above; provided, however, that the Participant shall immediately cease the performance of any Technical Direction upon receipt of a written instruction to that effect from the Contracting Officer.
- D. If in the opinion of the Participant any Technical Direction issued by the DOE Project Officer is within one of the categories as defined in B.2. (a) through (d) above, the Participant shall not proceed but shall notify the Contracting Officer in writing within five working days after the receipt of any such Technical Direction and shall request the Contracting Officer to rescind such direction or mutually agree to modify the agreement accordingly.
- E. The only persons authorized to give Technical Direction to the Participant under this Agreement are the Contracting Officer and any "DOE Project Officer" as listed in Block 11 of the face page. Any action taken by the Participant in response to any direction given by any person other than the Contracting Officer or DOE Project Officer shall not be binding upon the Government.

DOE F 4600.2 (03-94) Replaces EIA-459A

U.S. Department of Energy FEDERAL ASSISTANCE REPORTING CHECKLIST

1. Identification Number:	2. Program/Project Title:					
DE-SC02-00ER12245	Financial Assistance Solicitation (FAS) for Commercialization Assistance Program for Awardees in the Small Business Innovation Research (SBIR) Program					
3. Recipient: TBD	, ·	, ,				
4. Reporting Requirements: PROGRAM/PROJECT MANAGEMENT REPORTING	Frequency	No. of Copies	Addressees			
 □ DOE F 4600.3, "Federal Assistance Milestone Plan" □ DOE F 4600.3A, "Milestone Log" □ DOE F 4600.4, "Federal Assistance Budget Information" □ DOE F 4600.5, "Federal Assistance Management Summary Report" □ DOE F 4600.6, "Federal Assistance Program/Project Status Report" ☑ SF-269A, "Financial Status Report" TECHNICAL INFORMATION REPORTING 	F	2	See NFAA Block 12			
☐ DOE F 1430.22, Notice of Energy RD&D Project ☐ Technical Progress Report (Informal)	A (See 5a below)	3	See NFAA Block 11			
☐ Topical Report ☐ Final Technical Report	F (See 5b below)	1 2	See NFAA Block 11 See NFAA Block 12			
 A - As Necessary; within 5 calendar days after events. F - Final; 90 calendar days after the performance of the effort ends. Q - Quarterly; within 30 days after end of calendar quarter or portion thereof. O - One time after project starts; within 30 days after award. X - Required with proposals or the application or with significant planning changes. Y - Yearly; 30 days after the end of program year. (Financial Status Reports 90 days). S - Semiannually; within 30 days after the end of program fiscal half year. 5. Special Instructions: 						
a. Progress Report: Three copies of a Progress Report must be submitted as soon as possible after different phases of the project have been completed. b. Final Report: Three copies must be submitted within 90 days after the expiration date of the total performance period if the project is not to be renewed or extended, and must be accompanied by two copies of DOE F 241.1, "Announcement of Department of Energy (DOE) Scientific and Technical Information (STI)." (The final technical report should include a summary of the work performed, together with comments on the lessons learned by the project and on any particularly promising projects for commercial success noted by the recipient.) 6. Prepared by: (Signature and Date) 7. Reviewed by: (Signature and Date)						
6. Prepared by: (Signature and Date) 7. F	Reviewed by: (Signature	and Date)				

Intellectual Property Provisions Non Research and Development Large and Small Business, Nonprofit Organizations Educational Institutions, and Others

01.	FAR	52.227-1	Authorization and Consent (JUL 1995)			
		52.227-2	Notice and Assistance Regarding Patent and Copyright Infringement (AUG 1996) This clause is not applicable if the award is for less than \$100,000.			
03.	3. FAR 52.227-3		FAR 52.227-3 Patent Indemnity (APR 1984)			
04.	FAR	52.227-14	Rights in Data - General, as modified by DEAR 927.409 (Effective Apr 1998) If this award requires the use or delivery of limited rights data and/or restricted computer software, Alternates II and III are incorporated, unless modified upon recommendation of Patent Counsel. In awards for basic or applied research with educational institutions, paragraph (d)(3) is replaced with Alternate IV, unless software is specified for delivery or other special circumstances exist.			
05.	FAR	52.227-16	Additional Data Requirements (JUN 1987)			
06.	FAR	52.227-23	Rights to Proposal Data (Technical) (JUN 1987)			
07.	DEAF	R 952.227-9	Refund of Royalties (MAR 1995)			

01. FAR 52.227-1 Authorization and Consent

AUTHORIZATION AND CONSENT (JUL 1995)

- (a) The Government authorizes and consents to all use and manufacture, in performing this contract or any subcontract at any tier, of any invention described in and covered by a United States patent (1) embodied in the structure or composition of any article the delivery of which is accepted by the Government under this contract or (2) used in machinery, tools, or methods whose use necessarily results from compliance by the Contractor or a subcontractor with (i) specifications or written provisions forming a part of this contract or (ii) specific written instructions given by the Contracting Officer directing the manner of performance. The entire liability to the Government for infringement of a patent of the United States shall be determined solely by the provisions of the indemnity clause, if any, included in this contract or any subcontract hereunder (including any lower-tier subcontract), and the Government assumes liability for all other infringement to the extent of the authorization and consent hereinabove granted.
- (b) The Contractor agrees to include, and require inclusion of, this clause, suitably modified to identify the parties, in all subcontracts at any tier for supplies or services (including construction, architect-engineer services, and materials, supplies, models, samples, and design or testing services expected to exceed the simplified acquisition threshold); however, omission of this clause from any subcontract, including those at or below the simplified acquisition threshold, does not affect this authorization and consent.

(End of clause)

02. FAR 52.227-2 Notice and Assistance Regarding Patent and Copyright Infringement

NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (AUG 1996)

- (a) The Contractor shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.
- (b) In the event of any claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed under this contract, the Contractor shall furnish to the Government, when requested by the Contracting Officer, all evidence and information in possession of the Contractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the Government except where the Contractor has agreed to indemnify the Government.
- (c) The Contractor agrees to include, and require inclusion of, this clause in all subcontracts at any tier for supplies or services (including construction and architect-engineer subcontracts and those for material, supplies, models, samples, or design or testing services) expected to exceed the simplified acquisition threshold at FAR 2.101.

(End of clause)

03. FAR 52.227-3 Patent Indemnity.

PATENT INDEMNITY (APR 1984)

(a) The Contractor shall indemnify the Government and its officers, agents, and employees against liability, including costs, for infringement of any United States patent (except a patent issued upon an application that is now or may hereafter be withheld from issue pursuant to a Secrecy Order under 35 U.S.C. 181) arising out of the manufacture or delivery of supplies, the performance of services, or the construction, alteration, modification, or repair of real property (hereinafter referred to as "construction work") under this contract, or out of the use or disposal by or for the account of the Government of such supplies or construction work.

- (b) This indemnity shall not apply unless the Contractor shall have been informed as soon as practicable by the Government of the suit or action alleging such infringement and shall have been given such opportunity as is afforded by applicable laws, rules, or regulations to participate in its defense. Further, this indemnity shall not apply
- to (1) an infringement resulting from compliance with spe- cific written instructions of the Contracting Officer direct- ing a change in the supplies to be delivered or in the materials or equipment to be used, or directing a manner of performance of the contract not normally used by the Contractor, (2) an infringement resulting from addition to or change in supplies or components furnished or construction work performed that was made subsequent to delivery or performance, or (3) a claimed infringement that is unreasonably settled without the consent of the Contractor, unless required by final decree of a court of competent jurisdiction.

 (End of clause)

Alternate I (APR 1984). The following paragraph (c) is added to the clause:

(c) This patent indemnification shall not apply to the following items:

[Contracting Officer list and/or identify the items to be excluded from this indemnity.]

Alternate II (APR 1984). The following paragraph (c) is added to the clause:

(c) This patent indemnification shall cover the following items:

[List and/or identify the items to be included under this indemnity.]

Alternate III (JUL 1995). The following paragraph is added to the clause:

() As to subcontracts at any tier for communication service, this clause shall apply only to individual communication service authorizations over the simplified acquisition threshold issued under this contract and covering those communications services and facilities (1) that are or have been sold or offered for sale by the Contractor to the public, (2) that can be provided over commercially available equipment, or (3) that involve relatively minor modifications.

04. FAR 52.227-14 Rights in Data - General, as modified by DEAR 927.409 (Effective Apr 1998)

RIGHTS IN DATA - GENERAL (JUN 1987)

(a) Definitions.

- (1) Computer data bases, as used in this clause, means a collection of data in a form capable of, and for the purpose of, being stored in, processed, and operated on by a computer. The term does not include computer software.
- (2) Computer software, as used in this clause, means (i) computer programs which are data comprising a series of instructions, rules, routines, or statements, regardless of the media in which recorded, that allow or cause a computer to perform a specific operation or series of operations and (ii) data comprising source code listings, design details, algorithms, processes, flow charts, formulae, and related material that would enable the computer program to be produced, created, or compiled. The term does not include computer data bases.
- (3) *Data*, as used in this clause, means recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. For the purposes of this clause, the term does not include data incidental to the administration of this contract, such as financial, administrative, cost and pricing, or management information.
- (4) Form, fit, and function data, as used in this clause, means data relating to items, components, or processes that are sufficient to enable physical and functional interchangeability, as well as data identifying source, size, configuration, mating, and attachment characteristics, functional characteristics, and performance requirements; except that for computer software it means data identifying source, functional characteristics, and

performance requirements but specifically excludes the source code, algorithm, process, formulae, and flow charts of the software.

- (5) Limited rights data, as used in this clause, means data, other than computer software, developed at private expense that embody trade secrets or are commercial or financial and confidential or privileged. The Government's rights to use, duplicate, or disclose limited rights data are as set forth in the Limited Rights Notice of subparagraph (g)(2) of this section if included in this clause.
- (6) Restricted computer software, as used in this clause, means computer software developed at private expense and that is a trade secret; is commercial or financial and is confidential or privileged; or is published copyrighted computer software, including minor modifications of any such computer software. The Government's rights to use, duplicate, or disclose restricted computer software are as set forth in the Restricted Rights Notice of subparagraph (g)(3) of this section if included in this clause.
- (7) Technical data, as used in this clause, means recorded data, regardless of form or characteristic, that are of a scientific or technical nature. Technical data does not include computer software, but does include manuals and instructional materials and technical data formatted as a computer data base.
- (8) *Unlimited rights*, as used in this clause, means the rights of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, including by electronic means, and perform publicly and display publicly, in any manner, including by electronic means, and for any purpose whatsoever, and to have or permit others to do so.

(b) Allocation of rights.

- (1) Except as provided in paragraph (c) below regarding copyright, the Government shall have unlimited rights in:
 - (i) Data first produced in the performance of this contract;
 - (ii) Form, fit, and function data delivered under this contract;
- (iii) Data delivered under this contract (except for restricted computer software) that constitute manuals or instructional and training material for installation, operation, or routine maintenance and repair items, components, or processes delivered or furnished for use under this contract; and
- (iv) All other data delivered under this contract unless provided otherwise for limited rights data or restricted computer software in accordance with paragraph (g) below.
 - (2) The Contractor shall have the right to:
- (i) Use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of this contract, unless provided otherwise in paragraph (d) below;
- (ii) Protect from unauthorized disclosure and use those data which are limited rights data or restricted computer software to the extent provided in paragraph (g) below;
- (iii) Substantiate use of, add or correct limited rights, restricted rights, or copyright notices and to take other appropriate action, in accordance with paragraphs (e) and (f) below; and
- (iv) Establish claim to copyright subsisting in data first produced in the performance of this contract to the extent provided in subparagraph (c)(1) below.

(c) Copyright.

(1) Data first produced in the performance of this contract. Unless provided otherwise in subparagraph (d) below, the Contractor may establish, without prior approval of the Contracting Officer, claim to copyright subsisting in scientific and technical articles based on or containing data first produced in the performance of this contract and published in academic, technical or professional journals, symposia proceedings or similar works. The prior, express written permission of the Contracting Officer is required to establish claim to copyright subsisting in all other data first produced in the performance of this contract. When claim to copyright is made, the Contractor shall affix the applicable copyright notices of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including contract number) to the data when such data are delivered to the Government, as well as when the data are published or deposited for registration as a published work in the U.S. Copyright Office. For data other than computer software the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable worldwide license in such copyrighted data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government. For computer software, the Contractor grants to the Government and others acting in its behalf, a paid-up nonexclusive, irrevocable worldwide license in such copyrighted computer software to reproduce, prepare derivative works, and perform publicly and display publicly by or on behalf of the Government.

- (2) Data not first produced in the performance of this contract. The Contractor shall not, without prior written permission of the Contracting Officer, incorporate in data delivered under this contract any data not first produced in the performance of this contract and which contains the copyright notice of 17 U.S.C. 401 and 402, unless the Contractor identifies such data and grants to the Government, or acquires on its behalf, a license of the same scope as set forth in subparagraph (1) above; provided, however, that if such data are computer software the Government shall acquire a copyright license as set forth in subparagraph (g)(3) below if included in this contract or as otherwise may be provided in a collateral agreement incorporated in or made part of this contract.
- (3) Removal of copyright notices. The Government agrees not to remove any copyright notices place on data pursuant to this paragraph (c), and to include such notices on all reproductions of the data.

(d) Release, publication and use of data.

- (1) The Contractor shall have the right to use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of this contract, except to the extent such data may be subject to the Federal export control or national security laws or regulations, or unless otherwise provided below in this paragraph or expressly set forth in this contract.
- (2) The Contractor agrees that to the extent it receives or is given access to data necessary for the performance of this contract which contain restrictive markings, the Contractor shall treat the data in accordance with such markings unless otherwise specifically authorized in writing by the Contracting Officer.
- (3) The Contractor agrees not to assert copyright in computer software first produced in the performance of this contract without prior written permission of the DOE Patent Counsel assisting the contracting activity. When such permission is granted, the Patent Counsel shall specify appropriate terms, conditions, and submission requirements to assure utilization, dissemination, and commercialization of the data. The Contractor, when requested, shall promptly deliver to Patent Counsel a duly executed and approved instrument fully confirmatory of all rights to which the Government is entitled.

(e) Unauthorized marking of data.

- (1) Notwithstanding any other provisions of this contract concerning inspection or acceptance, if any data delivered under this contract are marked with the notices specified in subparagraphs (g)(2) or (g)(3) below and use of such is not authorized by this clause, or if such data bears any other restrictive or limiting markings not authorized by this contract, the Contracting Officer may at any time either return the data to the Contractor, or cancel or ignore the markings. However, the following procedures shall apply prior to canceling or ignoring the markings.
- (i) The Contracting Officer shall make written inquiry to the contractor affording the Contractor 30 days from receipt of the inquiry to provide written justification to substantiate the propriety of the markings;
- (ii) If the Contractor fails to respond or fails to provide written justification to substantiate the propriety of the markings within the 30-day period (or a longer time not exceeding 90 days approved in writing by the Contracting Officer for good cause shown), the Government shall have the right to cancel or ignore the markings at any time after said period and the data will not longer be made subject to any disclosure prohibitions.
- (iii) If the Contractor provides written justification to substantiate the propriety of the markings within the period set in subdivision (i) above, the Contracting Officer shall consider such written justification and determine whether or not the markings are to be canceled or ignore. If the Contracting Officer determines that the markings are authorized, the Contractor shall be so notified in writing. If the Contracting Officer determines, with concurrence of the Head of the Contracting Activity, that the markings are not authorized, the Contracting Officer shall furnish the Contractor a written determination, which determination shall become the final agency decision regarding the appropriateness of the markings unless the Contractor files suit in a court of competent jurisdiction within 90 days of receipt of the Contracting Officer's decision. The Government shall continue to abide by the markings under this subdivision (iii) until final resolution of the matter either by the Contracting Officer's determination becoming final (in which instance the Government shall thereafter have the right to cancel or ignore the markings at any time and the data will no longer be made subject to any disclosure prohibitions), or by final disposition of the matter by court decision if suit is filed.
- (2) The time limits in the procedures set forth in subparagraph (1) above may be modified in accordance with agency regulations implementing the Freedom of Information Act (5 U.S.C. 552) if necessary to respond to a request thereunder.
- (3) This paragraph (e) does not apply if this contract is for a major system or for support of a major system by a civilian agency other than NASA and the U.S. Coast Guard subject to the provisions of Title III of the Federal Property and Administrative Services Act of 1949.

(4) Except to the extent the Government's action occurs as the result of final disposition of the matter by a court of competent jurisdiction, the Contractor is not precluded by this paragraph (e) from bringing a claim under the Contract Disputes Act, including pursuant to the Disputes clause of this contract, as applicable, that may arise as the result of the Government removing or ignoring authorized markings on data delivered under this contract.

(f) Omitted or incorrect markings.

- (1) Data delivered to the Government without either the limited rights or restricted rights notice as authorized by paragraph (g) below, or the copyright notice required by paragraph (c) above, shall be deemed to have been furnished with unlimited rights, and the Government assumes no liability for disclosure, use, or reproduction of such data. However, to the extent the data has not been disclosed without restriction outside the Government, the Contractor may request, within 6 months (or a longer time approved by the Contracting Officer for good cause shown) after delivery of such data, permission to have notices placed on qualifying data at the Contractor's expense, and the Contracting Officer may agree to do so if the Contractor:
 - (i) Identifies the data to which the omitted notice is to be applied;
 - (ii) Demonstrates that the omission of the notice was inadvertent;
 - (iii) Establishes that the use of the proposed notice is authorized; and
- (iv) Acknowledges that the Government has no liability with respect to the disclosure, use, or reproduction of any such data made prior to the addition of the notice or resulting from the omission of the notice.
- (2) The Contracting Officer may also (i) permit correction at the Contractor's expense of incorrect notices if the Contractor identifies the data on which correction of the notice is to be made, and demonstrates that the correct notice is authorized, or (ii) correct any incorrect notices.

(g) Protection of limited rights data and restricted computer software.

- (1) When data other than that listed in subparagraphs (b)(1)(i), (ii), and (iii) above are specified to be delivered under this contract and qualify as either limited rights data or restricted computer software, if the Contractor desires to continue protection of such data, the Contractor shall withhold such data and not furnish them to the Government under this Contract. As a condition to this withholding, the Contractor shall identify the data being withheld and furnish form, fit, and function data in lieu thereof. Limited rights data that are formatted as a computer data base for delivery to the Government is to be treated as limited rights data and not restricted computer software.
 - (2) [Reserved.]
 - (3) [Reserved.]

(h) Subcontracting.

The Contractor has the responsibility to obtain from its subcontractors all data and rights therein necessary to fulfill the Contractor's obligations to the Government under this contract. If a subcontractor refuses to accept terms affording the Government such rights, the Contractor shall promptly bring such refusal to the attention of the Contracting Officer and not proceed with subcontract award without further authorization.

(i) Relationship to patents.

Nothing contained in this clause shall imply a license to the Government under any patent or be construed as affecting the scope of any license or other right otherwise granted to the Government.

(j) The Contractor agrees, except as may be otherwise specified in this contract for specific data items listed as not subject to this paragraph, that the Contracting Officer or an authorized representative may, up to three years after acceptance of all items to be delivered under this contract, inspect at the Contractor's facility any data withheld pursuant to paragraph (g)(1) above, for purposes of verifying the Contractor's assertion pertaining to the limited rights or restricted rights status of the data or for evaluating work performance. Where the Contractor whose data are to be inspected demonstrates to the Contracting Officer that there would be a possible conflict of interest if the inspection where made by a particular representative, the Contracting Officer shall designate an alternate inspector.

(End of clause)

Alternate II (Jun 1987)

(g)(2) Notwithstanding subparagraph (g)(1) of this clause, the contract may identify and specify the delivery of limited rights data, or the Contracting Officer may require by written request the delivery of limited rights data that has been withheld or would otherwise be withholdable. If delivery of such data is so required, the Contractor may affix the following "Limited Rights Notice" to the data and the Government will thereafter treat the data, subject to the provisions of paragraphs (e) and (f) of this clause, in accordance with such Notice:

LIMITED RIGHTS NOTICE (JUN 1987)

(a) These data are submitted with limited rights under Government contract No.	(and
subcontract No, if appropriate). These data may be reproduced and used by the	ne Government with
the express limitation that they will not, without written permission of the Contractor, be used	for purposes of
manufacture nor disclosed outside the Government; except that the Government may disclosed	se these data
outside the Government for the following purposes, if any, provided that the Government ma	ikes such disclosure
subject to prohibition against further use and disclosure:	

-[Agencies may list additional purposes as set forth in 27.404(d)(1) or if none, so state]

(b) This Notice shall be marked on any reproduction of these data, in whole or in part. (End of notice)

Alternate III (Jun 1987)

(g)(3)(i) Notwithstanding subparagraph (g)(1) of this clause, the contract may identify and specify the delivery of restricted computer software, or the Contracting Officer may require by written request the delivery of restricted computer software that has been withheld or would otherwise be withholdable. If delivery of such computer software is so required, the Contractor may affix the following "Restricted Rights Notice" to the computer software and the Government will thereafter treat the computer software, subject to paragraphs (e) and (f) of this clause, in accordance with the Notice:

RESTRICTED RIGHTS NOTICE (JUN 1987)

- (a) This computer software is submitted with restricted rights under Government Contract No. _____ (and subcontract ______, if appropriate). It may not be used, reproduced, or disclosed by the Government except as provided in paragraph (b) of this Notice or as otherwise expressly stated in the contract.
 - (b) This computer software may be:
- (1) Used or copied for use in or with the computer or computers for which it was acquired, including use at any Government installation to which such computer or computers may be transferred;
- (2) Used or copied for use in a backup computer if any computer for which it was acquired is inoperative:
 - (3) Reproduced for safekeeping (archives) or backup purposes;
- (4) Modified, adapted, or combined with other computer software, provided that the modified, combined, or adapted portions of the derivative software incorporating restricted computer software are made subject to the same restricted rights;
- (5) Disclosed to and reproduced for use by support service Contractors in accordance with subparagraphs (b)(1) through (4) of this clause, provided the Government makes such disclosure or reproduction subject to these restricted rights; and
 - (6) Used or copied for use in or transferred to a replacement computer.
- (c) Notwithstanding the foregoing, if this computer software is published copyrighted computer software, it is licensed to the Government, without disclosure prohibitions, with the minimum rights set forth in paragraph (b) of this clause.
- (d) Any others rights or limitations regarding the use, duplication, or disclosure of this computer software are to be expressly stated in, or incorporated in, the contract.
- (e) This Notice shall be marked on any reproduction of this computer software, in whole or in part. (End of notice)
- (ii) Where it is impractical to include the Restricted Rights Notice on restricted computer software, the following short-form Notice may be used in lieu thereof:

RESTRICTED RIGHTS NOTICE SHORT FORM (JUN 1987)

Use, reproduction,	or disclosure is subject to restrictions set f	forth in Contract No.
(and subcontract subcontractor)."	, if appropriate) with	(name of Contractor and
,	(End of notice)	

(iii) If restricted computer software is delivered with the copyright notice of 17 U.S.C. 401, it will be presumed to be published copyrighted computer software licensed to the Government without disclosure prohibitions, with the minimum rights set forth in paragraph (b) of this clause, unless the Contractor includes the following statement with such copyright notice: "Unpublished-rights reserved under the Copyright Laws of the United States."

Alternate IV (Jun 1987)

(c) Copyright--(1) Data first produced in the performance of the contract. Except as otherwise specifically provided in this contract, the Contractor may establish claim to copyright subsisting in any data first produced in the performance of this contract. When claim to copyright is made, the Contractor shall affix the applicable copyright notice of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including contract number) to the data when such data are delivered to the Government, as well as when the data are published or deposited for registration as a published work in the U.S. Copyright Office. For data other than computer software, the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable, worldwide license for all such data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government. For computer software, the Contractor grants to the Government and others acting on its behalf, a paid-up, nonexclusive, irrevocable worldwide license for all such computer software to reproduce, prepare derivative works, and perform publicly and display publicly, by or on behalf of the Government. (End of notice)

05. FAR 52.227-16 Additional Data Requirements

ADDITIONAL DATA REQUIREMENTS (JUN 1987)

- (a) In addition to the data (as defined in the clause at 52.227-14, Rights in Data-General clause or other equivalent included in this contract) specified elsewhere in this contract to be delivered, the Contracting Officer may, at any time during contract performance or within a period of 3 years after acceptance of all items to be delivered under this contract, order any data first produced or specifically used in the performance of this contract.
- (b) The Rights in Data-General clause or other equivalent included in this contract is applicable to all data ordered under this Additional Data Requirements clause. Nothing contained in this clause shall require the Contractor to deliver any data the withholding of which is authorized by the Rights in Data-General or other equivalent clause of this contract, or data which are specifically identified in this contract as not subject to this clause.
- (c) When data are to be delivered under this clause, the Contractor will be compensated for converting the data into the prescribed form, for reproduction, and for delivery.
- (d) The Contracting Officer may release the Contractor from the requirements of this clause for specifically identified data items at any time during the 3-year period set forth in paragraph (a) of this clause.

(End of clause)

06. FAR 52.227-23 Rights to Proposal Data

RIGHTS TO PROPOSAL DATA (TECHNICAL)(JUN 1987)

	Appendix P
Except for data contained on pages _	, it is agreed that as a condition of award of this contract, and
notwithstanding the conditions of any	notice appearing thereon, the Government shall have unlimited rights (as
defined in the "Rights in DataGenera	al" clause contained in this contract) in and to the technical data contained
in the proposal dated	, upon which this contract is based.

07. DEAR 952.227-9 Refund of Royalties

REFUND OF ROYALTIES (MAR 1995)

- (a) The contract price includes certain amounts for royalties payable by the Contractor or subcontractors or both, which amounts have been reported to the Contracting Officer.
- (b) The term "royalties" as used in this clause refers to any costs or charges in the nature of royalties, license fees, patent or license amortization costs, or the like, for the use of or for rights in patents and patent applications in connection with performing this contract or any subcontract here-under. The term also includes any costs or charges associated with the access to, use of, or other right pertaining to data that is represented to be proprietary and is related to the performance of this contract or the copying of such data or data that is copyrighted.
- (c) The Contractor shall furnish to the Contracting Officer, before final payment under this contract, a statement of royalties paid or required to be paid in connection with performing this contract and subcontracts hereunder together with the reasons.
- (d) The Contractor will be compensated for royalties reported under paragraph (c) of this clause, only to the extent that such royalties were included in the contract price and are determined by the Contracting Officer to be properly chargeable to the Government and allocable to the contract. To the extent that any royalties that are included in the contract price are not, in fact, paid by the Contractor or are determined by the Contracting Officer not to be properly chargeable to the government and allocable to the contract, the contract price shall be reduced. Repayment or credit to the Government shall be made as the Contracting Officer directs. The approval by DOE of any individual payments or royalties shall not prevent the Government from contesting at any time the enforceability, validity, scope of, or title to, any patent or the proprietary nature of data pursuant to which a royalty or other payment is to be or has been made.
- (e) If, at any time within 3 years after final payment under this contract, the Contractor for any reason is relieved in whole or in part from the payment of the royalties included in the final contract price as adjusted pursuant to paragraph (d) of this clause, the Contractor shall promptly notify the Contracting Officer of that fact and shall reimburse the Government in a corresponding amount.
- (f) The substance of this clause, including this paragraph (f), shall be included in any subcontract in which the amount of royalties reported during negotiation of the subcontract exceeds \$250.

(End of clause)